COAL SLURRY PIPELINES

HEARINGS

BEFORE THE

SUBCOMMITTEE ON SURFACE TRANSPORTATION

OF THE

COMMITTEE ON COMMERCE, SCIENCE,
AND TRANSPORTATION
UNITED STATES SENATE

NINETY-SEVENTH CONGRESS

SECOND SESSION

ON

IMPACT OF FEDERAL POWER OF EMINENT DOMAIN LEGISLATION FOR COAL SLURRY PIPELINES

SEPTEMBER 13 AND 16, 1982

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COAL SLURRY PIPELINES

SEPTEMBER 13, 1982

U.S. Senate,
Committee on Commerce, Science, and Transportation,
Subcommittee on Surface Transportation,
Kansas City, Mo.

The committee met, pursuant to notice, at 9 a.m. Monday, September 13, 1982, at the legislative assembly room, Jackson County Courthouse, 415 East 12th Street, Kansas City, Mo. Hon. John Danforth (chairman of the subcommittee) presiding.

Staff members assigned to these hearings: Cindy Douglass, staff counsel and Linda Morgan, minority staff counsel.

OPENING STATEMENT BY SENATOR DANFORTH

Senator Danforth. Good morning, ladies and gentlemen. The Subcommittee on Surface Transportation today begins 2 days of hearings on the impact of coal slurry pipelines. Last month the Senate Committee on Energy and Natural Resources reported out S. 1844, legislation that would give the power of Federal eminent domain to such pipelines. Companion legislation is pending in the House of Representatives.

Coal slurry pipelines could have a substantial impact on the Nation's transportation system, including aspects that fall within the subcommittee's legislative responsibilities.

We intend today to look at the impact that such pipelines could have on the Nation's railroads, particularly in the Midwest. We also intend to look at possible effects on water supply, consumer prices, and agriculture.

Let me first state some of my concerns about coal slurry pipelines. I'm concerned that they will divert scarce water from the semiarid States of the eastern Rocky Mountains to the water-rich gulf coast; I am concerned that consumers will suffer, not gain, from their construction; I am concerned that the railroads will suffer a devastating economic blow; and I am concerned that the legislation now before the Senate will simply give special treatment to a small number of large and powerful corporations with little or no net benefit to society as a whole. These are issues that I want to explore with some care in these 2 days of hearings.

I have a statement from Senator Pressler which I will insert in the record at this point.

[The statement follows:]

STATEMENT OF SENATOR PRESSLER

The impact of coal slurry pipelines in midwestern states is a complex matter with many issues that need to be examined. It is my hope that this hearing will provide a fair and objective forum for discussion of these issues.

One major question is that of water supplies needed for coal slurry pipeline development. Several years ago, the Energy Transportation System Incorporated (ETSI) initiated a proposal to construct a coal slurry pipeline from Wyoming to Louisiana. The water needs involved in this proposal are of great concern to South Dakota. The original proposal required pumping water from the Madison aquifer. This plan would have depleted the water supply for a number of cities and hundreds of ranches in South Dakota, Wyoming and Montana. To avoid this problem and to provide revenues for South Dakota water projects, the sale of water from the Oahe reservoir on the Missouri River in central South Dakota was negotiated with ETSI.

The Oahe dam and reservoir, completed in 1962, was authorized and constructed under the Pick-Sloan Missouri Basin program. The purpose of this program was to provide flood control, navigation, irrigation, municipal and industrial water supplies, and electric power generation for the Upper Midwest region. South Dakota sacrificed over 530,000 acres of land for this project. My home state suffered this loss of over half a million acres of prime farming land so that states like Missouri, Iowa and Nebraska could obtain flood control relief, hydroelectric power, additional navigation and irrigation opportunities, and increased industrial and domestic water resources. South Dakota made this sacrifice in good faith, with the promise that we would receive assistance for major irrigation projects. However, these promises have not been kept. South Dakota did not get any irrigation projects nor did we receive compensation for the precious and valuable farmland we lost. In fact, South Dakota has benefitted the least from the Pick-Sloan program. Nebraska uses 46 times as much Missouri River water for industrial purposes as South Dakota. Iowa uses 76 times more water and Missouri consumes 116 times more water for industrial use than my home state. It is obvious tht some states have gained immense economic benefits at South Dakota's expense. How can our neighboring states begrudge South Dakota the legitimate use of a resource which has proven so beneficial to them?

In an effort to save the Madison aquifer, create revenue for water development and provide water to several western South Dakota communities, my state negotiated the sale of 50,000 acre feet of water annually for 10 years. The sale of this water is a small portion of the 9 million acre feet of water per year available for Missouri Basin states' use. In fact, the total amount of water negotiated in the ETSI agreement is only one-half of one percent of available water. More water evaporates annually from the Oahe reservoir than will be sold under this agreement.

Meanwhile, the revenue from this water sale will be placed in a water development fund to begin financing the water projects promised to South Dakota over 30 years ago. The ETSI project will also provide much needed water for 10 communities in the western part of my state. Fortunately, South Dakota can benefit from such a project. However, if water resources such as Lake Oahe had not been available, pipeline construction could have caused many problems for my state.

South Dakota's experience demonstrates the importance of state water rights in any consideration of coal slurry pipeline construction. Water is a scarce and valuable resource that must be protected and used wisely. Priorities such as domestic water needs must be met before water is allocated to new transportation schemes such as coal slurry pipelines.

I would like to thank the Subcommittee Chairman for the opportunity to present South Dakota's viewpoint on this critical and complex issue.

Senator DANFORTH. Our time today is short, and our witness list is long, and so what I would like to do is to begin right away. What we have asked the witnesses to do, everybody, as far as I know, has submitted a written statement. Those statements will be incorporated in the record, if you will not read them, so you don't even have to ask that they be incorporated. Because of the very long list of witneses, and we are pleased that so many people are here participating. I would like to ask the witnesses to restrict themselves to 5 minutes each, and summarize their statements.

The first witness is Mr. Martin Fitzpatrick, Director of the Office of Transportation in the U.S. Department of Agriculture.

STATEMENT OF MARTIN FITZPATRICK, DIRECTOR, OFFICE OF TRANSPORTATION, DEPARTMENT OF AGRICULTURE

Mr. FITZPATRICK. Good morning, Mr. Chairman. Thank you for this opportunity. The Secretary of Agriculture, John Block, regrets that he could not be here today. I am pleased to appear before your subcommittee to discuss the impact in the Midwest of the Federal power of eminent domain legislation for coal slurry pipelines.

This administration supports competition in the area of energy development and transportation. However, it does not support the legislation which has been introduced in Congress to provide a Federal right of eminent domain. Opposition to this legislation reflects President Reagan's firm commitment to reversing the trend of increasing Federal encroachment upon legitimate areas of States' jurisdictions. Granting Federal eminent domain for coal slurry pipelines is contrary to that commitment since it results in an abrogation of State sovereignty.

Shortly after his election to office, President Reagan stated in a memorandum to Interior Secretary James Watt, and I quote:

> Our commitment to the vitality of State government should not be abandoned simply because it may be at times inconvenient. The extension of Federal powers of eminent domain should not be undertaken lightly.

In lieu of the Federal powers of eminent domain, the promoters of coal slurry pipelines have two options. One is through private agreement. The second is through States' power of eminent domain. If a State is unwilling to compel its citizens in this fashion or if it sees no benefit sufficient for it do do so, then a firm commitment to federalism should argue that the States should be allowed to make that decision.

At the present time, Mr. Chairman, 12 States have exercised this authority to allow eminent domain for coal slurry pipelines. They include Utah, Wyoming, Colorado, North Dakota, Oklahoma, Texas, Arkansas, Louisiana, Florida, Ohio, West Virginia, and North Carolina. The first coal slurry pipeline constructed in the United States and in operation in Ohio from 1957 to 1963 was granted State eminent domain over its entire length of 108 miles, all within the State of Ohio.

As a representative of the Department of Agriculture and a farmer, I must acknowledge that some sectors of the agricultural community have expressed concerns about the impact of coal slurry pipelines on the revenues of railroads and their resulting quality of railroad service for grain shippers and other agricultural shippers. For example, one Midwest rail carrier derives 42 percent of its gross revenues from coal traffic and at the same time is a major hauler of farm products, especially grain. From the administration's point of view, we believe that the marketplace should make any judgment between competing modes of transportation. A choice among transportation modes would be made by considering which mode is most desirable for a given situation.

The other possible adverse impact, one you referred to in your opening statement, Mr. Chairman, to agriculture, from coal slurry pipelines, is the increased demands which the pipelines could place upon scarce water resources and many of our farming and ranching areas. Competition for water is very site specific, which implies that the agricultural impacts might be severe and would vary from location to location. In addition, comparing water requirements by all users with available supplies on an area-wide basis frequently glosses over the severity of the water competition problem and the potential economic adjustments facing farmers in rural communities affected by a specific pipeline. The impacts which coal slurry pipelines may have upon agriculture can be best assessed at the State level.

The Secretary of Agriculture, John Block, stands ready to assist in these areas or other assessments through the Department's research agencies or its liaison with the land grant universities.

So I thank you again, Mr. Chairman, for the opportunity to speak and represent the Secretary of Agriculture today. I will be glad to answer any questions you might have.

Senator DANFORTH. Thank you, Mr. Fitzpatrick. As I understand it, the administration's formal position is that it opposes the billion the grounds that the preemption should be a matter of State law rather than Federal law.

Mr. FITZPATRICK. That's correct.

Senator DANFORTH. But the administration has not taken a formal position on the merits of the coal slurry pipeline and the effects of coal slurry pipelines on agriculture, water, and so on.

Mr. FITZPATRICK. That is correct, Mr. Chairman.

Senator DANFORTH. What you have done this morning is to raise the questions of the effect on agriculture, the effect on what would happen to railroads which are necessary to serve farmers, what would happen to water supply and so forth, but without really taking a position on that; is that right?

Mr. FITZPATRICK. That's correct. At this time, Mr. Chairman, we feel that there is reason to very carefully evaluate the situation as it affects agriculture, and we feel that there is a lot of work to be done, and we will be very interested in helping the States work out this problem.

Senator DANFORTH. In your judgment, has there been such a careful evaluation to date?

Mr. FITZPATRICK. I do not believe there has been a careful evaluation at this point of the coal slurry pipelines' impact on agriculture.

Senator DANFORTH. What does the administration plan to do about that?

Mr. FITZPATRICK. Well, at this time, as I mentioned, we are leaving the research in the hands of the States; but the Secretary of Agriculture has aked me to convey to you that we will be ready to help and offer the services of our various agencies, both my agency and others in the Department, the Soil Conservation Service, the Economics Research Service, and many other agencies who have particular expertise in areas that would be affected by the pipeline.

Senator DANFORTH. You mean on an informal basis, or are you proposing some kind of formal study?

Mr. FITZPATRICK. Well, at this time we are proposing no formal study. I think we will be glad to respond to any requests from you, sir, or from your staff or from the State of Missouri.

Senator DANFORTH. All right. I appreciate that. Do you have any idea of how long that would take?

Mr. **Fitzpatrick.** At this time, I do not; but I believe that, at your request, we could develop something within 3 to 6 months, maybe sooner.

Senator **Danforth.** Do you believe that Congress would be acting rashly if it were to enact S. 1844 prior to such a study being completed?

Mr. **Fitzpatrick.** I feel that more consideration needs to be made for agriculture and that there should be more work done. Whether a full study is necessary, I really can't make that judgment; but I do believe that more attention should be given to the agriculture questions, which you, I know, have done so far.

Senator **Danforth.** If rail transportation were interrupted for agriculture or if it were made much more expensive, that would clearly be a major impact; would it not?

Mr. **Fitzpatrick.** Absolutely. As you know, sir, the farm community is in pretty tough shape right now. Any additional marketing costs would greatly hamper the farmer's ability to compete in the domestic market as well as the international market, and the Department of Agriculture is very concerned about competition in foreign markets right now.

Senator **Danforth.** Thank you very much, Mr. Fitzpatrick. I appreciate you being with us.

Mr. **Fitzpatrick.** I appreciate it.

Senator **Danforth.** Next we have a panel consisting of Richard Davidson, senior vice president of Missouri Pacific, and Irvine O. Hockaday, Jr., president of Kansas City Southern.

STATEMENTS OF RICHARD DAVIDSON, SENIOR VICE PRESIDENT OF OPERATIONS, MISSOURI PACIFIC RAILROAD, AND IRVINE O. HOCKADAY, PRESIDENT AND CHIEF EXECUTIVE OFFICER, KANSAS CITY SOUTHERN INDUSTRIES

Mr. **Davidson.** Good morning, Mr. Chairman.

Senator **Danforth.** Good morning, Mr. Davidson. Thank you for being with us.

Mr. **Hockaday.** Good morning, Senator.

Mr. **Davidson.** My name is Richard K. Davidson, and I am senior vice president operations of Missouri Pacific Railroad Co. I have been asked to appear at this hearing in place of Mr. R. G. "Mike" Flannery, president and CEO, Missouri Pacific Railroad, who is unable to be here today due to prior commitments. I appreciate the opportunity to appear before the Surface Transportation Subcommittee of the Senate Commerce Committee, and commend the subcommittee members for their efforts to examine all aspects of the coal transportation issue, which are numerous and extremely complex. I would like to take this opportunity to discuss what coal means to Missouri Pacific; what we have done, and are continuing to do, to meet the needs of coal shippers; and what the loss of coal would mean to MoPac and its employees.

Coal is the largest single commodity transported by Missouri Pacific. In 1981, Missouri Pacific transported 31,934,000 tons of coal systemwide, which produced revenues of $170,723,000. These coal revenues accounted for approximately 9 percent of MoPac's 1981 system revenues. In Missouri alone, MoPac participated in the transportation of 8,829,000 tons of coal to utilities and other industries served directly and indirectly by it. For the first 5 months of 1982, MP transported 15,156,000 tons of coal systemwide, producing system revenues of approximately $87,562,000.

In order to handle these quantities of coal, Missouri Pacific has made, and continues to make, significant investments in both its physical plant and equipment. Missouri Pacific has authorized and/or made the following plant investments over the last several years solely for purposes of expanding its capacity to transport western coal to its five major receivers of same:

Year:	*Plant investment*
1975	$3,936,000
1976	18,822,000
1977	2,479,000
1978	2,033,000
1979	2,653,000
1980	12,736,000
1981	44,291,000
1982 (authorized)	28,491,000
Total (1981 dollars)	115,440,000

Plant investments have consisted of an array of capital improvement projects, such as rail relay programs; construction and extension of sidings and second main line tracks; construction of terminal facilities, fueling facilities and yard tracks; and installation of centralized traffic control—CTC. Equipment investments have consisted primarily of purchases of locomotives. Over the last several years, MP has acquired 74 coal service locomotive units solely for use in transporting coal in unit-train shipments.

In addition to the aforementioned investments made solely for purposes of transporting western coal to five major destinations, Missouri Pacific has made the following investments on its major coal hauling routes:

1975-77	$31,092,000
1978-80	18,551,000
1981-82	7,580,000
Total (1981 dollars)	57,223,000

Again, such investments include expenditures for rail relay programs, siding extensions, terminal and fueling facilities, and the installation of centralized traffic control. These investments increased Missouri Pacific's abilities and capacity to transport both coal and other commodities.

Missouri Pacific, and other railroads, have spent significant sums of money to meet present and projected coal transportation needs. Further expenditures are programed, provided the need therefor continues. I should also point out that railroads have a number of means at their disposal by which they can effectively increase their coal-hauling capacity and their ability to serve new coal sources and consumers. These means include the utilization of double or multiple tracks in heavily used rail corridors; expanding the use of passing tracks and centralized traffic control—CTC—using alternate routes and alternate connecting carriers; and laying heavier rail. By way of example, all 802 miles of MoPac's Kansas City to Alexandria, La., main line, which is one of our primary coal-hauling lines, has been laid with heavy rail. As a result of our track maintenance program, the tie and ballast are in superb shape. Throughout its entire length, we have installed either centralized traffic control or automatic block signals. We are justifiably proud of this line of rail, and it is an excellent route for the movement of increasing numbers of unit trains of Western coal. As this example indicates, the rail industry's ability to handle projected increases in coal tonnage can be accomplished primarily through the upgrading improving of existing lines, which improvements benefit all users of rail service, not just coal shippers.

I have talked at length about what coal traffic means to Missouri Pacific, and what Missouri Pacific has invested in order to meet the challenge of transporting ever-increasing quantities of coal. I would like now to discuss some of the potential impacts of what the loss of coal traffic to slurry pipelines would mean to MoPac. For example, we have estimated that, based on 1985 traffic projections, and 1982 rate levels, the diversion to pipeline of coal traffic destined to just five of our major Midwestern and Southern coal receivers would deprive MoPac of approximately $156 million in annual revenues. Of course, other railroads would incur similar revenue losses if coal traffic were diverted to pipeline. Such tremendous losses of revenue would have adverse domino effects, such as causing rail rates on noncoal traffic to be increased. Such losses would be catastrophic to the substantial investments already made by the railroads. The largest 1981 annual coal movement to a shipper on the Missouri Pacific involved 4,880,028 tons; the smallest 1981 annual coal movement to a shipper on the Missouri Pacific involved 100 tons. Of course, the smaller individual shipments alone would not justify the large investments by Missouri Pacific in both physical plant and equipment. The large annual shipments are important, but mainly as major portions of a total annual volume large enough to justify the necessary expenditures. The slurry pipeline promoters want only large volume movements to a single destination or multiple destinations sufficiently close in distance to avoid large additional delivery charges and costs. In past years, slurry witnesses have testified before congressional committees that the minimum annual volume at which a slurry pipeline can be economic is 6 million tons. The great majority of electric utility generating plants in this country use less that 6 million tons of coal per year. The great majority of electric utility plants cannot be served by a slurry pipeline and the railroads, barges, and trucks will have to continue to serve those utilities and the industrial users, whether they be located near the destination of a slurry pipeline or somewhere between origin and destination of a slurry pipeline or anywhere else. The diversion of large volume of coal movements from railroad to slurry pipelines cannot help but increase coal transportation costs for those utilities not served by the pipeline and also for industrial users who will continue to be served by rail.

The diversion of coal traffic from rail to pipeline would have a most negative impact on rail labor. Assuming that Missouri Pacific was to lose the bulk of its coal traffic to just its five major receivers of Western coal, we estimate that, in the operating department alone, approximately 1,300 jobs will be lost.

I would like to address whether coal slurry pipeline operators should be granted a Federal power of eminent domain. Due to the economics of coal pipelines, pipeline operators must contract their line to capacity, under long-term contracts; and, once contracted to capacity, it is de facto impossible for the operator to comply with a common carrier obligation to accept for transportation any coal tendered by any shipper. These conditions are vastly different from the traditional common carrier service requirements imposed on railroads. Railroads must carry, in essence, all traffic tendered, whether it be highly rated or not. Even as to coal traffic, railroads must, if requested, transport coal in single-carload shipments, from and to all types of shippers and consumers, large and small. This must be done without any long-term contract that would guarantee a steady flow of coal. Regardless of how S. 1844 is drafted, the economics of slurry pipelines are such that they will never be common carriers. It would be grossly unfair to vest in such private carriers a Federal power of eminent domain. Only natural gas pipelines have the right to use Federal condemnation power to take private property for their own use and this privilege was given to them by Congress during the national emergency of World War II. Railroads, which are subject to common carrier obligations, are not the beneficiaries of Federal eminent domain authority. Railroads have been recipients of grants of eminent domain authority from the various States, which are in the best position to determine whether a given project or industry should be given eminent domain authority and, if so, under what conditions. Coal slurry promoters want a special privilege which preempts State law and protects them against State law.

Both H.R. 4230 and S. 1844 contain no cost control provisions and no regulation of pipeline rates. The throughput contracts provide that the transportation costs to be paid by the shipper will be based upon the actual construction costs no matter what that turns out to be as compared to the estimated costs plus a fixed guaranteed rate of return on investment. Construction cost escalations may contribute heavily to the passthrough costs to utility ratepayers. The slurry proponents have always vigorously opposed cost control provisions, rate regulation provisions and opposed provisions guaranteeing to the public that the cost of transporting by pipeline will be less than transporting by rail. The slurry promoters have always claimed that slurry pipeline transportation costs will be less than rail costs, but they have consistently refused to have in their legislation provisions assuring reduction in costs as a prerequisite to their right to use the Federal power to condemn private property.

Thank you very much for the opportunity to appear before you today. I would be happy to try to answer any questions you may have.

Senator **Danforth**. Mr. Hockaday?

Mr. **Hockaday**. Senator, I'm Irv Hockaday, chief executive officer of Kansas City Southern Industries and chairman of the board of its railroad subsidiary, Kansas City Southern Railway. On my right is Thomas E. Dewey, Jr., who is a financial consultant retained by us in this matter.

Since the Missouri Pacific has addressed this issue in terms of their railroad, appropriately so, perhaps I will take a less-focused view; and I will try to do this in 5 or 6 minutes; and, in deference to your schedule, if you want to interrupt, I'll be happy to stop at any time.

It does seem to me that history has demonstrated that governmental involvement has not always been a complete panacea for consumer ills, so I hope that Congress will unleash the governmental good fairy into the slurry pipeline picture only if there is a clear and imminent risk to the consumer at hand or a substantial and convincing benefit to the consumer can be conferred without unreasonable harm to others. In the absence of at least one of these motivating factors, and preferably both, I would submit that any congressional entry into the private sector is questionable at best.

With that preface, let me just say that our railroad goes from Kansas City, at its northern point, to the gulf, and that coal is critically important to us as it is to the Missouri Pacific. Ten years ago we hauled virtually no coal. Today it's about 16 percent of our revenues. That equates to about $50 million. Like the Missouri Pacific, it took substantial investment for us to generate that growth. Although that investment is in place in our case, and in the case of other railroads, the demand for coal transportation has declined due to energy price deregulation and laudable conservation efforts. That seems to me to require the question, why would Congress support the construction of a slurry pipeline in that environment?

The theory, it seems to me, has to be that a slurry pipeline will contribute to the stabilization and reduction of consumer prices, and that is a theory you will hear from the Power and Light Co. in Kansas City as well as others, but it's a theory that sinks rather quickly. Pipelines don't get built unless they can be financed. They can't be financed unless there are long-term take-or-pay contracts. The pipeline promoters require 25 to 30 years, and yet I would hope it's clear that no responsible coal user would enter into such contracts unless it is clear that the cost to the user is manageable and attractive too—in light of the rail option. Pipeline proponents cannot or will not identify the contract price with any convincing precision, so I don't see where there is any benefit to the consumer. If the response is: "The consumer always benefits from an additional source of supply," it seems to me that that argument promotes a clarity defect of rather grotesque proportions. The user gives up any rail alternative when the user enters a 30-year contract, so I submit there is no case to be made for governmental support of slurry.

I will make one other point briefly, if I may; and that is that what is being proposed to Congress here is the use of Federal legislative process to enrich one private industry at the expense of another, which may be all right in the private sector, but also there is a substantial cost to the public involved. That seems to me to raise different questions.

Railroads cannot shift their fixed costs when there is a diversion of traffic, and therefore they have to spread these costs over lower tonnage and fewer shippers, and rail rates go up. It seems to me that there is a recognition on the part of the pipeline interests, not only of the threat of water diversion and the loss of substantial jobs, but also because of those things, concerns on the part of farmers, ranchers, and other users of our land and water resources. That is why I think the pipeline interest are seeking to masquerade as common carriers. There is nothing further from the fact than their being common carriers.

Pipelines are inflexible. They cannot be rerouted to utilize competition from other coal sources they do not serve. They are just a one-dimensional service from big coal producers to big coal users. If they are not common carriers, Senator, they are not under the provisions of 1844 pipelines with the public responsibilities traditionally imposed by Congress.

Without exception, I think, Congress has required environmental protection, financial and bonding responsibilities, siting and construction protection, and carrier service obligations with respect to all other pipeline projects, the Alaskan pipeline, the Northern Tier pipeline. These protections are set out in section 28 of the Mineral Lands Leasing Act. It's rather strange to me that 1844 is, by comparison, resoundingly silent about such publicly focused protections; and, as responsible elected officials, I think Congress must address this inconsistency; and we are submitting a chart which I hope will assist you in that process.

So, to conclude, S. 1844 is wholly inadequate because it creates no demonstrable benefits. It portends considerable and widespread harm and—because there is no rationale for it on any basis that we can see.

Thank you.

[The statement follows:]

STATEMENT OF I. O. HOCKADAY, PRESIDENT AND CHIEF EXECUTIVE OFFICER, KANSAS CITY SOUTHERN INDUSTRIES, INC.

Mr. Chairman, I very much appreciate your invitation to testify before the Subcommittee today about the coal slurry pipeline legislation which is pending before Congress.

I have asked our Washington, D.C., counsel to accompany me. He is Mr. Jon T. Brown, a senior partner in the firm of Brown, Roady, Bonvillian & Gold.

I am also accompanied by the financial consultant to Kansas City Southern Industries, Mr. Thomas E. Dewey, Jr., of New York City. At the conclusion of my own remarks, I will ask that Mr. Dewey be recognized to comment briefly on the financial requirements for construction of these coal slurry projects. This financing, along with slurry contract methods, will result in consumer rates and utility credit problems which we feel are not adequately understood by potential users.

Kansas City Southern Industries is the parent company to the KCS Railway Company and the Louisiana and Arkansas Railway Company. This 1,500 mile rail system serves Kansas City at its northern end and the ports of New Orleans, Baton Rouge, and Lake Charles, in Louisiana, along with the Texas markets of Beaumont, Port Arthur, and Dallas on the south. Within that territory, the KCS rail system carries a diversified traffic mix with emphasis on energy-related commodities such as coal, coke, petroleum products, and petrochemicals. Grain, paper, pulp, and soda ash also make substantial contributions to revenue. Our marketing pattern will continue to emphasize our efficiency in handling these bulk commodities.

A critical element in this marketing expansion is coal. As recently as 10 years ago, coal was virtually unknown in our commodity mix. Our expansion into that market began in the mid-1970s and now accounts for some 16 percent of revenue. We expect this year to handle 12 million tons of coal which primarily originates in the Powder River Basin of Wyoming and is handed over to KCS by the Burlington Northern at Kansas City. We terminate those shipments in Missouri; in Arkansas; and in Texas.

Our successful entry into these coal markets is the result of a $93 million investment in track and equipment between 1975 and 1980 for the principal purpose of handling coal traffic. An investment of that magnitude was justified by our knowledge that industrial conversion to coal would continue in our territory through the foreseeable future. Our expectation is that our share in this coal traffic will continue to expand in direct proportion to the lively economic growth forecasted for the sunbelt region.

Those expectations are tempered with the knowledge that competition in the KCS territory is intense. With the exception of Conrail, every major American railroad provides service within the combination of States which KCS serves. In all, we have 12 major competitors. Their own investments in future growth have been geared primarily toward those optimistic forecasts of the early 1970s which said coal demand would increase dramatically through the close of the century. That projected demand materialized only in part. As a result, the coal-hauling capacity of the American railroad system is far in excess of demand.

This point cannot be overemphasized. Slurry pipelines were first proposed at a time of oil shortages and projections of resulting booming coal demand. While coal demand has grown in the past decade, it has not grown to anything approaching the projections of the mid-1970s. As a result, there is not going to be nearly enough coal for both rail and slurry transportation systems to haul. Because coal slurry pipelines would only be built if they are guaranteed markets through long-term contracts of 25 to 30 years, S. 1844 is in effect creating a governmentally sanctioned monopoly for slurry pipelines and precluding the numerous railroads now serving the market area from competing.

The theory behind this legislation when it was first discussed in the early 1970's was to meet an explosive demand for coal. Now, however, the legislation is still pending even though its rationale has completely disappeared: because of energy price deregulation, energy conservation efforts, and availability of other energy sources, the projected demands for coal have failed to materialize.

The railroad capital investments are already in place and will more than accommodate increases in market demand in the foreseeable future. Vast financial resouces need not be diverted from other national needs. What is obviously required, however, to operate and maintain this rail system is sufficient traffic from which costs and a reasonable return on investment can be drawn.

It's difficult to speak in terms of national averages in describing the impact of these coal slurry pipelines on KCS operations and the communities we serve. Let's look instead at the specific effects of one pipeline to the operations of the Kansas City Southern Railway Company within its own territory.

Energy Transportation Systems, Inc. (ETSI) is proposing a 1,400 mile pipeline from Wyoming to utilities in Oklahoma, Louisiana, and Arkansas. That pipeline is designed to carry 35 million tons of coal into the KCS territory.

We know with a reliable degree of precision what our marketing potential could be along our rail system in ETSI's general marketing area. As I mentioned before, KCS currently handles 12 million tons of coal annually, up slightly from our earlier projects.

If ETSI is built and absorbs 35 million tons of current rail traffic, the coal market available to all railroads competing in the territory will be reduced to approximitely 3.5 million tons annually; 12 railroads competing for one-third the amount of coal KCS currently handles.

It must be understood about these pipelines that their presence does not create new demand or new markets for coal. Since slurry pipelines will have to start operations with nearly full capacity, coal used in such pipelines will necessarily be diverted from rail. Our fixed costs do not adjust in any fashion to this diversion. We are simply forced to spread those fixed costs among fewer shippers, increasing the transportation costs of other consumer goods like food, agricultural chemicals, auto parts, and building construction materials.

Coal slurry pipelines will not lead to increased transportation competition. Instead, what this legislation would create is a federally-approved traffic grab, shifting traffic from one mode to another. This legislation would use the federal legislative process to enrich one private industry to the great detriment of another, at great public cost.

The social impact of these traffic diversions is even more sobering. A reduction in permanent rail labor jobs in the communities along the rail system is unavoidable. Unlike railroads, pipeline operations offer few permenent jobs. so that the diversion of coal traffic to pipeline transportation results in a net employment loss for the nation. For KCS, that's people whose families have been an integral part of railroading for generations.

At a certain point in the construction of these pipeline projects, the competitive impact on other railroads will begin to be felt by KCS and its shipper community.

Take, for example, the ETSI situation once again. Its pipeline into out territory isn't the only pipeline by which the ETSI consortium proposed to move coal out of the Powder River Basin. This partner, Texas Eastern, plans to move 45 million tons of Powder River Basin coal annually by pipeline to Texas. The combined tonnage—some 80 million annual tons—is most of the current Powder River Basin production. Remember that these two pipelines will not open new mines; they will not create new coal demand. They simply seek to deliver the sum and substance of Powder River Basin production which is currently hauled, for example, by the Burlington Northern railroad to their pipeline operations.

This forces the BN into a position of spreading costs among its remaining shippers in the same fashion I described before. That's important to the KCS system because it means that the BN traffic which we pick up at Kansas City will arrive with a higher transportation cost. It means higher costs for consumers in the KCS territory. It may also mean that BN traffic can't maintain its competitive position in the KCS territory, resulting in further diversions of traffic away from the KCS rail system.

There are other competitive factors which should not be overlooked. Railroads are more energy efficient. Their construction and operations pose fewer threats to the natural environment. Most important, the transportation of coal by rail does not require that coal be mixed with equal amounts of water, as is required in pipeline transportation. I pass over that latter point briefly, knowing that others plan to discuss the water problem in detail. It is, without question, the most critical public policy question in the endless debate which surrounds passage of S. 1844.

I would like to turn instead to the regulatory features of S. 1844, drawing some comparisons with the common carrier obligations of the railroads.

Coal slurry promoters would have us believe that all they really need from the Congress is the power to use federal eminent domain. They seek this special privilege because, they say, railroads will otherwise deny them passage across rail rights-of-way. As coalitions have formed in opposition to coal slurry pipeline legislation, we have learned from experience that the real threat to pipeline construction is the fear of farmers and environmentalists that irreversible harm will be done to land and water resources and to the rural economy.

The slurry industry seeks to justify these special privileges because they hold themselves available as common carriers. They are not common carriers. By definition, they are long-term contract carriers. They must be contracted to nearly full capacity before construction can even be undertaken. They offer no competition for shippers they do not directly serve, nor may their own clients during the 30-year period of a contract enter into competitive alternatives which might result in lower electrical costs for utility consumers. It is, furthermore, an inflexible means of transportation. Pipelines cannot be rerouted to utilize competition from other coal sources they do not serve. Essentially, these pipelines offer one-dimensional service flowing in one direction: from big coal producers to big coal users. Their ability to hold themselves available as true common carriers is terminally flawed by the nature and realities of their design.

And if they are not common carriers providing an essential public service, they are also not, under the provisions of S. 1844, a pipeline with the public responsibilities traditionally required by Congress. We have examined the requirements imposed by Congress on the Alaskan oil and natural gas pipelines, the Northern Tier project, and Section 28(a) of the Mineral Lands Leasing Act. This latter Act serves as a "boilerplate" regulatory format for pipeline construction and operations.

Contained in those Acts are provisions for environmental protections, financial and binding responsibilities, siting and construction protections, carrier service obligations, and other specifications which Congress has, without exception, placed on all other pipeline projects. We placed those requirements alongside sections of S. 1844 where one would expect to find similar provisions. The regulatory features of S. 1844 are largely a blank page.

I am submitting for the hearing record our work sheet which lays out these comparisons. The argument is best understood in a graphical representation of the problem. I time, we plan to expand this analysis to include a similar presentation of the differences in service obligations under the ICC and Staggers Rail Acts, which govern rail service, and the provisions of S. 1844, which do little to convey public service responsibilities to coal slurry pipelines.

The work which Mr. Dewey has done thus far will give an adequate understanding of the most objectionable consumer impacts of coal slurry pipeline construction.

I will conclude my own remarks by suggesting that S. 1844 is a wholly inadequate piece of legislation.

We argue against the rationale for need of its enactment. If Congress intends to act despite its adverse effects on other modes of transportation, employment, natural resources, and environmental quality, then the deficiencies described in my accompanying chart should be throughly addressed, along with deficiencies in the water language described in another document which I will submit for the hearing record.

Once again, thank you for allowing me to share with the subcommittee our concerns about the effects of coal slurry pipelines upon KCS rail operations. I would ask at this point that Mr. Dewey be recognized.

COMPARISON OF REGULATORY REQUIREMENTS FOR PIPELINE RIGHTS-OF-WAY ACROSS FEDEREAL LANDS

Pipeline requirements	Section 28a of the Mineral Leasing Act (30 U.S.C. § 185)	Northern Tier oil pipeline	Alaska natural gas pipeline	Trans-Alaska oil pipeline	Coal slurry pipelines under Senate bill 1844
Right of-way width limitation (50 feet)	X	X	X	X	
Pipeline safety requirements	X	X	X	X	
Financial disclosure by pipeline sponsor	X	X	X	X	
Public hearings/public comment	X	X	X	X	
Reimbursement by pipeline sponsor of application processing costs	X	X	X	X	
Annual advance payment of fair market value of right-of-way or permit	X	X	X	X	
Bonding requirements	X	X	X	X	
30-year limit on right-of-way or permit	X	X	X	X	
Abandonment is grounds for suspension of right-of-way or permit	X	X	X	X	
Joint use of right-of-way with compatible uses	X	X	X	X	
Construction, operation, maintenance, and regulation as common carriers	X	X	X	X	
Inspection by DOT	X	X	X	X	
Reporting of spills, leaks, and explosions	X	X	X	X	
Interagency cooperation	X	X	X	X	
Applicant to provide specific details on route, information for EIS		X			
Specific criteria for pipeline system approval including information on feasibility of financing; environmental impact; reliability of cost estimates and risk of cost overruns; net national economic costs and benefits of each such system; effect on international relations; impact on competition; degree of safety and efficiency; capacity and cost of system expansion; relationship of system to national energy policy and to national security considerations					
Publication of findings		X	X		
Civil rights affirmative action			X		
Equal access to facilities			X		
Export limitations			X		
Strict liability				X	
Pipeline liability fund				X	
Control and removal of pollutants at expense of right-of-way holder					
Waiver of certain provisions available only upon Presidential recommendation and congressional joint resolution		X	X	X	
Civil rights affirmative action			X		
Equal access to facilities			X		
Export limitations			X		
Strict liability				X	
Pipeline liability fund				X	

COMPARISON OF REGULATORY REQUIREMENTS FOR PIPELINE RIGHTS-OF-WAY ACROSS FEDEREAL LANDS—Continued

Pipeline requirements	Section 28a of the Mineral Leasing Act (30 U.S.C. § 185)	Northern Tier oil pipeline	Alaska natural gas pipeline	Trans-Alaska oil pipeline	Coal slurry pipelines under Senate bill 1844
Control and removal of pollutants at expense of right-of-way holder				X	
Waiver of certain provisions available only upon Presidential recommendation and congressional joint resoultion		X	X	X	

Senator **Danforth**. You tend to be against it? Is that it?

Mr. **Hockaday**. I cut this down so that you hopefully would still be able to get that point.

Senator **Danforth**. Mr. Dewey, do you have anything that you would like to say?

STATEMENT OF THOMAS E. DEWEY, JR., FINANCIAL CONSULTANT, KANSAS CITY SOUTHERN RAILWAY

Mr. **Dewey**. Good morning, Mr. Chairman. Yes; I do. I am the financial adviser, consultant for the Kansas City Southern Railway and its parent company.

Recently we have seen a good deal of favorable publicity regarding coal slurry pipelines in the financial press, including editorials urging Congress to facilitate the happening of these economic bonanzas. Unfortunately, nowhere in the mountains of testimony before Congress during the years the pipeline proponents have been seeking Federal eminent domain, and nowhere among the encomiums of the financial press are to be found any figures documenting the assumption that these pipelines, if built, will transport coal more cheaply than the Nation's railroads. It is this subject that I intend to discuss in my testimony today.

Short of a full-scale consulting study, it is impossible to examine the economics of all the coal slurry pipelines which have been proposed. Of all the candidates, the one which is farthest advanced is that proposed by Energy Transportation Systems, Inc. [ETSI]. It is also among the longest, and thus presumably one of the most cost effective, and it is upon this pipeline that I will focus. My methodology and estimates of interest cost and equity returns can, of course, be equally applied to other proposed pipelines once their length and estimated construction costs are known.

The present official cost estimate for the ETSI pipeline has been given as approximately $3.5 billion, although of course no one knows how much the final cost would be. Recent costs estimating experience with giant construction projects has been very poor, and investors will not soon forget the Alaska pipeline, where the final cost was approximately eight times the original estimate, or the nuclear powerplant programs of Washington Public Power Supply System, where cost overruns were so large that the assembled credit base was insufficient to permit completion of the five powerplants, at least two of which have now been abandoned.

Nonetheless, we should start with the estimated construction cost and develop our analysis, later to see what conclusions follow as regards competitive efficiency and financeability.

The first step in postulating a financing plan is to estimate what portion of the financing can be financed through the issuance of debt securities and what portion by means of equity securities. Assuming satisfactory credit, large projects such as this are generally financed mostly by debt. Taking into account the factors present in this situation, I would set 70 percent as the maximum debt financing, with the remaining 30 percent required as equity. The $2.45 billion of debt financing will most likely be arranged through private placement with institutional investors, which will not be easy in today's climate, not just because of the size of the issue, but also because traditional sources of private placement financing have become increasingly unwilling to make long-term fixed rate investments in our present inflationary climate. I would therefore be surprised to see a maturity of more than 20 years for this security and I am estimating that an interest rate of 17 percent would be necessary to accomplish the financing. Assuming an annual sinking fund, on a level debt service basis this would require $435 million annually to service the debt.

It is much harder to determine what might be the minimum equity return necessary to attract $1.05 billion. On the one hand, the sponsors of the project, who have other rewards in mind, may be willing to make a substantial investment at a concessionary rate. Arm's-length investors, however, will be hard to come by, as the nature of regulation will only allow them to earn up to a stated ceiling, and then only to the extent that they have a net investment in the project. Thus, the idea of getting their money back and still being able to have earnings cannot work in this instance. I have assumed for calculation purposes a blended equity return of 20 percent, figuring that the sponsors will take less and arm's-length investors will require more. Again assuming annual payments, including repayment of the original equity, this would require payments to equity owners annually of $216 million.

To the cost of debt and equity must be added sufficient revenues to pay income taxes, as the return to equity owners and repayment of principal of the debt must be earned after taxes. Depreciation, a noncash charge, is an offset. Assuming straight line depreciation, income taxes for the 1st year would be $60 million, and in the 20th year taxes would have escalated to $413 million. Thus the revenues required just to service the capital employed in this pipeline project would rise from $711 million in the 1st year to $1,064 million in the 20th year. Assuming constant 100-percent utilization of the pipeline, a highly unrealistic assumption, the capital charge for the 37.5 million tons of annual throughput would rise from approximately $19 per ton in the 1st year to more than $28 per ton in the 20th year. Assuming a more reasonable 80 percent utilization of capacity or 30 million tons of annual throughput, the capital cost charge would rise from almost $24 per ton in the 1st year to more than $35 per ton in the 20th year.

Capital costs, of course, are not the only costs involved in operating a pipeline. There is labor, insurance, administrative expenses, and of course the cost of water, a very important item. In addition, this particular pipeline will have an added cost, as presently envisaged, of building and operating a water pipeline some 275 miles in length to bring water to the input point of the slurry line. Estimating costs such as these is not within my area of expertise, but I know that some experts feel that capital costs of a coal slurry pipeline should prove to be approximately two-thirds of total cost. In that the figure I am using for capital costs is for the slurry line only and does not include the capital cost of the water line, my extrapolation will therefore probably tend to underestimate total annual costs. Nonetheless, if the above capital cost charges per ton were to equal two-thirds of total cost, total cost per ton at 100 percent of capacity would rise from more than $28 in the 1st year to more than $42 in the 20th year, and at 80 percent of capacity would rise from more than $35 per ton in the 1st year to more than $53 per ton in the 20th year. Recent railroad tonnage charges for unit trains from the Powder River basin to the ETSI destination area available to me vary from approximately $12 to more than $22 per ton.

All these numbers are of course constructed on the assumption that, unlike virtually every other giant construction project in modern times, the ETSI pipeline will not exceed its current estimated costs. (It should be pointed out here that as recently as 1979 ETSI's cost estimate for this project was $1.25 billion.) Any cost overruns will of course have to be financed, and firm "hell or high water" contracts against which such financing is to be done will have to be totally open ended in this regard unless the sponsors can provide some other means of assuring investors that, once begun, the project will be finished and become operational.

There exists a serious question as to whether prospective contracting utilities in the delivery area will have sufficient demand to justify contracting for 37.5 million tons of slurry annually. It is my understanding that ETSI has long planned to have a portion of the slurry available for export and for sale to noncontract purchasers in the delivery area. However, as export and noncontract arrangements do not provide a basis for credit, the contracting utilities would thus wind up with the entire capital charge liability and contingent liability for cost overruns, only spread over a smaller tonnage. The liability of contracting utilities, thus, would on a per ton basis escalate proportionately from the numbers arrived at above.

Even assuming that one or more utilities will be willing to enter into contracts which can provide the basis for this massive financing, there are obvious public policy questions involved in permitting such contracts. Any such contract of necessity takes out of the hands of state public service commissions the continuing overview of the prices to be paid by the utilities for fuel, their largest element of cost after money. Further, the open-ended and inflexible nature of the obligation could well produce a situation where the utilities, and thus their ratepayers, would be paying more, and perhaps substantially more, for coal than coal could be purchased for elsewhere. The slurry would also have to be paid for whether it was delivered or not.

The above and other factors instill in me a fear that the right of Federal eminent domain is only the first half of the eventual shopping list of sponsors of coal slurry pipeline projects. U.S. Government guarantees of debt financing for these pipelines would eliminate the requirement for equity capital, lower the cost of debt capital and eliminate the problem of cost overruns, as the blank check of the taxpayers would be involved. It is this other half of the shopping list that the Congress and financial press have not been told about. Even if some satisfactory contracts with potential users can be negotiated, and not one has been announced to date, massive financial assistance from somewhere will still be needed. I urge the subcommittee to explore this topic fully before voting to grant coal slurry pipelines the unusual right of eminent Federal domain, thus encouraging them to come back for more when the financial facts of life eventually become clear.

I appreciate having had this opportunity to testify and will be happy to answer any questions your members might have.

Senator DANFORTH. Gentlemen, I do have a few question; and, if you could just keep your answers brief, I would appreciate it.

What is a take-or-pay contract?

Mr. DEWEY. I guess that's for me. A take-or-pay contract is a contract wherein a user agrees to buy a product, whether they need it or not; and, under the so-called hell-or-high-water type of take-or-pay contract, to pay for it whether he gets it or not.

Senator DANFORTH. All right. Now, it is clear that we are going to have to be using more coal in the future, our country will. Would the railroads, without the pipelines, be able to transport that coal in an efficient and timely and reasonable manner?

Mr. HOCKADAY. Our judgment is yes, but I think there is a certain objectivity that can be blended into that in terms of studies done by either the OTA or Department of Transportation or both, which indicate there is adequate capacity to haul by rail the additional tonnage projected for movement of coal in this country.

Mr. DAVIDSON. Mr. Chairman, Mr. Hockaday is absolutely right. The OTA in a 1978 study found more than ample capacity for any foreseeable coal growth. In fact, today about 20 percent of the rail track miles handle about 80 percent of the tonnage moved, so there is ample capacity on the Nation's railroads.

Senator DANFORTH. Let me just ask one more question, anticipating a point that I think will be made by Mr. Wasson. The question is, What's wrong with competition? Just playing the devil's advocate for a second, right now the transportation of coal is dependent on railroads. The utilities feel that rail transportation costs have gone up and will continue to go up very rapidly, that, with the Staggers Act, the prices, the costs, have increased rapidly; and that a pipeline would simply furnish another means of transportation; as a matter of fact, the utilities would argue, as did the Energy Committee, that pipelines would provide a relatively inflation-proof method of transportation, which would simply compete with you. They would say, "Well, what's wrong with a little competition? Isn't that the American way?"

Mr. HOCKADAY. Let me make a couple of quick points. What is wrong with competition? Obviously, nothing. It is important to recognize, though it is seldom acknowledged, that there exists significant competition within the railroad side of the transportation picture. There are 12 railroads that compete for commodity movements in our particular territory; and, in fact, in this particular context of coal slurry, because of the inherently fixed nature of the pipeline, there is more competition in the rail sector than there would be on the slurry side.

People tend to forget that coal into our territory, for example—and it's one of many examples—currently comes over the Burlington Northern out of the Powder River basin to Kansas City, from Kansas City over our railroad south. However, the likelihood is that the Union Pacific and Chicago Northwestern will enter the Powder River basin, offering another route. Furthermore, there is low volatile coal in the Hanna basin, which would provide another alternative to the movement of coal.

Now, they make the—the proponents make the statement, and it's a conclusion they state, it's wrong, that because there would be no competition you would have a problem with pricing. I think you should also know that the delivered price of coal, if you look at that, and then you take the percentage that transportation cost is to the total delivered price, you will find that the transportation cost as a percentage is less than it was 20 years ago, so I don't find any support for the argument. I would only add that, under the Staggers Act, there is a market dominance reality to this, which means that the ICC will continue to look at it.

Mr. **Dewey**. Mr. Chairman, let me add one quick thing to that. There is nothing wrong with competition. From the standpoint of the utility customer, the ratepayer, if he could have a coal slurry pipeline to choose from and a railroad to choose from at all times, that would be wonderful; but the real world isn't like that. You won't have a coal slurry pipeline unless the utility is stuck with it for 25 or 30 years, and that eliminates competition for 25 or 30 years. That is why the argument doesn't hold any water at all.

Senator **Danforth**. In other words, what you are saying is that there is nothing competitive about a long-term take-or-pay contract?

Mr. **Dewey**. Only until the minute the ink is dry, and after that there is no competition any more.

Senator **Danforth**. Who would own the pipeline?

Mr. **Dewey**. It would vary from pipeline to pipeline; but in most cases the promoters, who are construction companies, investment bankers, and gas transmission companies.

Senator **Danforth**. Would the utilities have an interest in them?

Mr. **Dewey**. I don't know of any one where they propose to.

Senator **Danforth**. How about ETSI?

Mr. **Dewey**. Well——

Mr. **Hockaday**. I don't know the proposed——

Mr. **Dewey**. I don't think there's a—well, Texas Eastern is a gas transmission company.

Mr. **Davidson**. Here is another one, Kansas, Nebraska——

Mr. **Dewey**. Kansas Nebraska pipeline is part of a consortium, too. I don't think we're talking about—by "utility," I mean the electric utility customer. I assumed that that was what you meant.

Mr. **Hockaday**. It's—I might add that I think the position of the utilities that the existence of a slurry pipeline will bring prices down is a sincere position; but I think the hope is so forlorn as to be naive and unrealistic; and it's important that we separate the consumer from the self-interest and natural self-interest of promoters and try to identify just where these speculative savings will find their way back to the consumers. If you try to trace that string to its origin, you never get there.

Senator DANFORTH. Gentlemen, thank you very much.

Next we have Mr. Ronald Wasson, Kansas City Power & Light.

STATEMENT OF RONALD WASSON, MANAGER OF FOSSIL FUELS FOR KANSAS CITY POWER & LIGHT CO.

Mr. WASSON. Good morning, Mr. Chairman.

My name is Ronald Wasson. I'm manager of fossil fuels for Kansas City Power and Light Co. I thank the committee for allowing me this opportunity to present my views on the issue of Federal eminent domain for coal slurry pipelines.

In addition to appearing on behalf of the company I'm also here representing the Western Coal Traffic League, an organization of shippers and receivers of coal mined from areas west of the Mississippi River. While my testimony will predominantly center on the views and experiences of Kansas City Power & Light Co., I would like to point out that our problems and interests are not unique and are shared by other members of the league, as well as utility and industrial coal shippers throughout the West.

KCPL favors the development of coal slurry pipelines because we believe the transportation competition provided by such development will help hold down the cost of providing electric service. Competition for the transportatoin of coal should directly benefit KCPL's electric and steam customers by stimulating more realistic freight rates for coal transportation which is provided by the railroads. The eminent domain legislation which is currently under consideration by the Congress will foster the development of competition through coal slurry pipelines, and KCPL supports this legislation.

Our company ships a total of about 5.5 million tons of coal per year. The freight bill for that is approximately $77 million at the present rate levels. That amounts to about $159 per customer per year for coal freight charges. The dollars which are associated with coal transportation are indeed quite large, as previous witnesses have pointed out.

Out company, along with many other Midwestern electric utilities, is a rail captive shipper on most of its rail movements. Since the early 1970's, we have increased our usage of low-sulfur Wyoming coal to about 3.3 million tons per year. Wyoming coal has advantages of being clean-burning and economical. The deposits there are very large. They are quite easy to mine. However, there is only one means available to us to transport this coal to the Midwest. That means is railroad. As a matter of fact, we are dependent upon only one railroad to originate the coal out of the Powder River Basin at this point in time, which is the Burlington Northern.

The Staggers Rail Act of 1980 essentially deregulated the railroad industry by granting a great deal of pricing freedom and by limiting the opportunities for a regulatory review of freight rates. As a result, many utilities, including our company, have experienced dramatic increases in rail rates since its enactment. The electric consumers served by KCPL ultimately and directly bear these increases in freight rates through increased costs of electricity.

Congress did include some provisions in the Staggers Act for protection of captive shippers, such as KCPL. Congress retained in the law the concept of continued regulation of rail rates where a railroad possessed market dominance. However, the Interstate Commerce Commission has recently reinterpreted that section of the act, and we believe that market dominance today is quite difficult to prove. Consequently, the ability of the rails to raise their rates is to some extent unlimited.

The Congress also offered a contract provision in the law when the Staggers Act was passed, and we believed that this held some glimmer of hope for captive shippers such as us. In some cases, however, the railroads are choosing to breach these contracts in order to raise their rates by excessive amounts. When this happens, the shippers doubt the value of such contracts and wonder if they have any real protection.

We believe the Staggers Act as now implemented offers virtually no protection for the shippers of coal who are captive to railroads. We believe that coal slurry pipeline development will hold down the users' cost for electric service by promoting competition in the transportation of coal and acting as an incentive for more realistic rates for the transportation of coal by railroads and balancing some of the pricing freedom which they now enjoy. We believe that, as utilities turn to coal, the price of electricity will continue to go up; but we believe that the coal slurry pipelines can help balance that increase and they can help hold down costs.

We have heard the arguments and the concerns about water which have been raised. We believe the issue is somewhat overstated. For example, the amount of water which would be used in the ETSI coal slurry pipeline will be a small fraction, only 1/60th of that which is available for use at Lake Oahe for industrial use. Some 3 million acre-feet of water are available at that site for industrial use. The ETSI contract with the State of South Dakota provides 50,000 acre-feet of water per year. The evaporation of water from Lake Oahe amounts to 500,000 acre-feet per year, which is 10 times the amount of water that is under contract for the ETSI project.

KCPL is not presently a participant in any of the proposed coal slurry pipelines. We do believe that our electric consumers will reap the benefits of competition in the coal transportation market, competition which currently does not exist. For this reason, we favor the proposed legislation granting eminent domain to coal slurry pipelines.

Thank you for this opportunity to present my statement, and I would be happy to answer any questions that you might have.

Senator DANFORTH. Thank you, Mr. Wasson. Are there any plans for any coal slurry pipeline that would serve Kansas City Power & Light?

Mr. WASSON. Not at the present time, sir.

Senator DANFORTH. Is there any initial planning or any glimmer in anybody's eye?

Mr. WASSON. There might be a glimmer in someone's eye, but there are no plans at this point in time.

Senator DANFORTH. So the only coal slurry pipelines that are planned right now or are operating right now are to serve other utilities?

Mr. WASSON. Other utilities, but we believe that their existence will provide some incentive and some competition and will help hold down rail rates.

Senator DANFORTH. Let me ask you, if there were no pipelines serving you, but there were pipelines serving others, wouldn't that necessarily hurt you?

Mr. WASSON. No; we don't believe so.

Senator DANFORTH. The reason I would think that is that, if you were going to continue to be dependent on rail transportation, and the railroads are having a major source of revenue skimmed off by pipelines, they would, it seems, necessarily increase rates on you, and therefore you and your customers would end up paying more.

Mr. WASSON. That is one viewpoint, but we believe that the threat of this competition in the marketplace would help hold down our rates as well.

Senator DANFORTH. You get your coal from Wyoming?

Mr. WASSON. About half of it, sir.

Senator DANFORTH. Do you own the coal?

Mr. WASSON. No; we do not.

Senator DANFORTH. Do you own any coal?

Mr. WASSON. We have some land in the Powder River Basin which is currently undeveloped, that we have not developed at present. We buy our coal from other mines.

Senator DANFORTH. Do you plan to get into the coal production business?

Mr. WASSON. We are evaluating that. We are proceeding with the permitting on our property, but we really have no firm plans to go into production there at this point in time.

Senator DANFORTH. Is it a growing trend in the utility industry to get into the business of producing coal?

Mr. WASSON. I don't believe so.

Senator DANFORTH. One concern that has been raised by some is the so-called vertical integration problem. Are you familiar with that?

Mr. WASSON. I understand the concept, yes, sir.

Senator DANFORTH. Let me just state for the record my understanding, and you tell me if I'm wrong. My understanding is that the utilities which would burn the coal and produce electricity are regulated—they are not really competitive industries, but regulated industries; that they in addition to actually producing and selling electricity would be in the business of mining coal, that they would own the coal in Wyoming, and that they would also own—have interests—in the coal slurry pipelines.

Mr. WASSON. They would control the production and transportation of it?

Senator DANFORTH. That's right, and therefore there would be no real marketplace effect operating anywhere along the line. They would own the coal. They would own the pipeline because of the long-term take-or-pay contracts. The railroads would be pretty much pushed out of it as a practical matter, and it would turn out that the utility companies would be getting back, in their rates, the cost of producing the electricity, the cost of producing the coal, and the cost of transporting the coal. Does that state the problem?

Mr. WASSON. I think it states the problem fairly. There are a couple of considerations I think about that, fairly recent developments. For example, one of the Iowa companies had a Wyoming subsidiary for producing coal, and recently the Iowa Public Service Commission disallowed those costs of producing coal. They said they were not competitive with the marketplace. Consequently, the utility was ordered to shut down its mines there and buy its coal elsewhere.

I think that the utility, if it enters this business, has to be very cognizant of the fact that the price of coal is going to have to be competitive in the marketplace with what other producers can do. If we enter that business, we have to be cognizant of that. Also I point out that one of the most successful utility coal subsidiary companies is one which primarily sells coal to other utilities competing in the marketplace with regular coal producers, not selling it to the parent company.

Senator DANFORTH. It was my impression that it's been difficult to trace back real costs in a very efficient manner; and therefore, in cases of vertical integration, it tends to be not a very accurate way of reconstructing what the true cost of production is. Am I wrong on that?

Mr. WASSON. I think those costs are fairly well identifiable. I believe that the subsidiary company would have to sell coal to the utility at an identifiable, clearly stated price, which can be compared with the marketplace.

Senator DANFORTH. If your company was contemplating doing business with a pipeline, that would be a very long-term contract, wouldn't it?

Mr. WASSON. It probably would be, but we generally make long-term contracts for coal in the vicinity of 20 or 30 years. The decision to construct and build and operate a powerplant is a 30-, 35-, or 40-year decision. It's a long-term decision.

Senator DANFORTH. What is a take-or-pay contract?

Mr. WASSON. A take-or-pay contract is one where you either take the coal or you pay the amount that you would have been obliged to pay had you taken the coal.

Senator DANFORTH. Would contracts between utilities and coal slurry pipelines be take-or-pay contracts?

Mr. WASSON. I don't know. It depends on what you can negotiate. It might be.

Senator DANFORTH. Do you think that they most probably would be?

Mr. WASSON. Again, I don't know. It depends upon the negotiating posture of the parties. I guess, from my viewpoint, I prefer for it not to be.

Senator DANFORTH. I mean realistically, wouldn't it have to be——

Mr. WASSON. It may be. It may not be.

Senator DANFORTH. To get the pipeline built?

Mr. WASSON. That's probably a question you should direct at the pipeline people.

Senator DANFORTH. Let me ask you, if it were a take-or-pay contract, wouldn't that pretty well do in the railroads?

Mr. WASSON. For that piece of the business it would, yes.

Senator DANFORTH. OK.

Mr. WASSON. It would lock it up for some period of time.

Senator DANFORTH. If there were a take-or-pay contract between another utility, say one in Arkansas, with a pipeline, and the pipeline would otherwise be a competitor with a railroad, wouldn't that put you in jeopardy?

Mr. WASSON. I don't believe so.

Senator DANFORTH. Wouldn't Kansas City Power & Light be in jeopardy?

Mr. WASSON. I don't believe it should. Why, please explain, if you could. I don't understand the jeopardy.

Senator DANFORTH. You do business with Missouri Pacific?

Mr. WASSON. No. Burlington Northern and Kansas City Southern.

Senator DANFORTH. Burlington Northern and Kansas City Southern. Supposing that the utility in Arkansas also is doing business with the same two railroads and then they go to a coal slurry pipeline. They are no longer doing business with Kansas City Southern and Burlington Northern.

Mr. WASSON. So you think that piece of revenue might place the railroad in jeopardy——

Senator DANFORTH. Well, the railroads are concerned about it, and you are very dependent on the railroads. If the railroads are weakened by the coal slurry pipeline, wouldn't you be vulnerable?

Mr. WASSON. If the railroads were weakened by that. I guess we don't really believe that that's the case. There is a lot of market growth to be had in coal transportation. The studies which I read by the DOT indicated that we needed a mix of rail and slurry pipelines in order to haul all of the coal that is going to be required in the 1990's and beyond, so we believe that that——

Senator DANFORTH. There is plenty of business for everybody?

Mr. WASSON. Yes.

Senator DANFORTH. Would a take-or-pay contract—let's say a 30-year take-or-pay contract—would that be viewed as a gamble?

Mr. WASSON. No. I don't think so. There is some risk any time you sign a long-term contractural agreement; but I believe, in terms of the slurry pipeline, the large amount of costs are the fixed costs, which are up front; and the variable costs, which would inflate over time, are very small; and therefore you would eliminate some of the risk of future inflation and cost.

Senator DANFORTH. But would you know, when you signed the contract, what the costs of construction would be?

Mr. WASSON. You may and you may not. I think we would probably do our own evaluation of what it might be and what the costs would be. We would have to do——

Senator DANFORTH. Supposing there were substantial overruns, who would end up paying for it?

Mr. WASSON. The electric consumer would most likely end up paying for it, although our shareholders might be asked to carry part of it, also.

Senator DANFORTH. Mr. Wasson, thank you very much.

Mr. WASSON. Thank you.

[The statement follows:]

STATEMENT OF RONALD G. WASSON, MANAGER, FOSSIL FUELS, KANSAS CITY POWER & LIGHT CO.

Mr. Chairman, my name is Ronald G. Wasson, and I am Manager of Fossil Fuels for Kansas City Power & Light Company. The Company provides electricity to some 345,000 customers who reside in 94 incorporated communities in 23 Western Missouri and Eastern Kansas counties. KCPL's annual payment to the railroads for coal transportation for our use and our partners typically amounts to more than $77 million at present rate levels. Coal freight expenses amount to approximately $154 annually for each KCPL customer. I thank the Committee for allowing me this opportunity to present my views on the issue of federal eminent domain for coal slurry pipelines.

In addition to appearing on behalf of the Company, I am also here representing the Western Coal Traffic League, an organization of shippers and receivers of coal mined from areas West of the Mississippi River. While my testimony will predominantly center on the views and experiences of Kansas City Power & Light Company, I would like to point out that our problems and interests are not unique, and are shared by other members of the League as well as utility and industrial coal shippers throughout the West.

KCPL favors the development of coal slurry pipelines because we believe the transportation competition provided by such development will help hold down the costs of providing electric service. Competition for the transportation of coal should directly benefit KCPL's electric and steam customers by stimulating more realistic freight rates for coal transportation provided by the railroads. The eminent domain legislation which is currently under consideration by the Congress, will foster the development of competition through coal slurry pipelines, and KCPL supports this proposed legislation.

Electric utilities use a total of 600 million tons of coal per year, or 80 percent of the country's total coal consumption. KCPL produces in excess of 95 percent of its electricity by burning coal, and our annual requirements approximate 5.5 million tons. Coal production and transportation costs are a significant portion of the cost of electricity, representing 36 percent of KCPL's total operating expense, or approximately $395 annually per customer. KCPL transports 71 percent of its coal by rail, with freight costs representing 39 percent of the total coal expense, or approximately $154 per customer per year. These facts plainly indicate that the dollars associated with coal and coal transportation are indeed quite large, even for a mid-sized utility such as KCPL. Although the expenses associated with coal use are large, the consumption of coal as a utility boiler fuel reduces dependence on expensive natural gas and oil, resulting in appreciable savings so long as the delivered price of coal can be held to reasonable levels.

KCPL, along with many other midwestern electric utilities, is a "rail captive" shipper on most of its coal movements. Since the early 1970's KCPL has increased its usage of low-sulfur Wyoming coal to about 3.3 million tons. Wyoming coal not only has the advantage of being clean burning, but the mine price is generally lower due to the large deposits, the ease of mining and economies of scale. Wyoming coal is presently transportable to the Midwest and KCPL, however, by only one means: Railroad. In our case, the only method of transporting the Powder River Basin coal upon which we depend is presently controlled by a single railroad, the Burlington Northern, resulting in a classic monopoly situation.

The Staggers Rail Act of 1980 essentially deregulated the railroad industry by granting a great deal of pricing freedom and by limiting the opportunities for regulatory review of freight rates. As a result, many utilities, including KCPL, have experienced dramatic increases in rail rates since its enactment. Further increases have been proposed by the railroads and are anticipated in the future. The electric consumers served by KCPL ultimately and directly bear these increases in freight rates through increased costs of electricity. Since economic theory generally holds that regulation of a monopoly provides a substitute for competition, thereby holding prices to comparable levels, Congress included provisions in the Staggers Act for the protection of captive shippers such as KCPL.

In order to allow captive shippers to call upon the ICC, Congress retained in the law the concept of continued regulation of rates where a railroad possessed market dominance, a concept which had been established in 1976 and applied by the Commission in numerous cases. Another very important aspect of the Staggers Act was the explicit statutory authorization for rail transportation contracts. It was hoped that through free negotiation coal shippers and carriers could agree on mutually acceptable transportation terms and prices. Unfortunately, since adoption of the Act, the promise of the contract rate provision has largely gone unfulfilled in the coal rate area, as the railroads have chosen to concentrate their efforts on making full use of the generous rate freedoms granted by Congress. In addition, the viability of the market dominance jurisdictional threshold and the protection it was intended to provide has been seriously threatened by recent actions of the ICC.

In a decision which is now under appeal in the Federal courts, the ICC has drastically changed the market dominance test that existed when the new law was passed in a manner that makes it very difficult, time consuming, expensive and complicated for a shipper to show that the ICC has jurisdiction to review a rail freight rate to determine whether it is too high. In the past, the Commission decided whether market dominance existed on the basis of the presence of absence of effective competition from other railroads or modes of transportation. Under its current policy, however, the ICC has made geographic and product competition major new elements to be considered. As a practical matter, what this means is that a shipper has to go through a lengthy and involved antitrust type proceeding just to determine if the ICC will hear a complaint about a rail fare.

The contract protection offered under the law which appeared to hold a glimmer of hope for some captive shippers has also been eroded and ignored. In some cases the railroads are choosing to breach pre-Staggers Act arrangements in order to raise their rates by excessive amounts, rather than negotiating new contracts for the future. When the railroads coose to abrogate previous agreements with shippers, many of them doubt the value of such shipment contracts and wonder if any "real" protection is afforded. In addition, even when the railroads are willing to negotiate they often simply offer a "take it or leave it" deal that solely serves their own interest.

The Burlington Northern Railroad which serves Kansas City Power & Light Company has proposed implementation of its "revenue adequacy plan" which would result in a substantial increase in our rail rates. Implementation of the BN's plan could cost Kansas City Power & Light Company and its partners, Kansas Gas and Electric Company, St. Joseph Light and Power Company, and the Empire District Electric Company, an estimated $89 million over the 1982–86 period in additional coal transportation costs which must be borne by the electric consumers of Missouri and Kansas.

In light of our experience and that of other utility coal shippers with the Staggers Rail Act, we submit that captive utility shippers have seen the small amount of protection which was contained in the Act eroded away, and are faced with the prospect of huge increases in the cost of rail transportation with no effective opportunity to resist. We belive the Staggers Rail Act as now implemented offers virtually no protection for the shippers of coal who are captive to the railroads.

Coal slurry pipeline development will help hold down the user's cost for electric service by promoting competition in the transportation of coal, thus acting as an incentive for more realistic ratres for the transportation of coal by the railroads and balancing some of the pricing freedom they now enjoy. As the utility industry increasingly turns to coal as a primary energy source, the increasing costs of coal transportation by rail are resulting in every higher electric bills. KCPL wants to do everything possible to keep those costs down. We believe coal slurry pipelines can help.

A recent study indicates that the operation of 11 hypothetical coal slurry pipelines, together with a 12th already functioning, could save utilities and other coal consumers between $100 million and $1.1. billion by 1995, under the most modest estimates. Electric consumers could reap total cost reductions of $4.6 billion to $5.2 billion by 1995 from a combination of reduced costs for such items as coal extraction, transportation and burning.

Unlike railroads, pipelines are sheltered from inflationary cost increases, a critical consideration for consumers of electricity. About 70 percent of the cost of operating a pipeline stems from the cost of building it and thus is fixed. Railroads, on the other hand, have a cost structure that is 70 percent variable because of such inflating features as labor and fuel. Currently, railroads are allowed to take automatic rate increases every three months in order to offset inflation. Even when costs do not rise, as has been the case for the last two quarters, rates are not lowered, they simply wait for the next increase. This system does not fight inflation, it feeds it.

As a company operating in Missouri, we have of course heard the concerns raised by the Missouri Attorney General's Office with respect to water. We believe this issue has been somewhat overstated, however. For example, the amount of water which will be utilized in the ETSI coal slurry project will be a small fraction (1/60 of that available for use at the Lake Oahe site in South Dakata. Some 3 million acre feet of water are available for industrial use on an annual basis. The ETSI project will only take 50,000 acre feet of water per year.

The evaporation of water from Lake Oahe amounts to 500,000 acre feet per year. This is ten times the amount of water under contract for the ETSI project.

The downstream flow of water from Oahe amounts to 29.4 million acre feet per year. This is nearly 600 times the amount of water under contract for ETSI. There is plenty of water for all concerned, so long as it is managed properly and carefully. We believe the legislation now before Congress is consistent with the public interest in this area, since it specifically and constitutionally guarantees that the residents of a state, through their elected state legislators, can decide for themselves whether to allow the water within their state's borders to leave through a slurry pipeline. This offers more than adequate protection for state water rights.

Although KCPL is not presently a participant in any of the proposed coal slurry pipelines, we believe our electric consumers will reap the benefits of competition in the coal transportation markets, competition which currently does not exist. For this reason, we favor the proposed legislation granting eminent domain to coal slurry pipelines.

I will be happy to answer any questions which members of the Committee may have at this time.

Senator DANFORTH. Next we have Mr. Lavon Danner of the Brotherhood of Locomotive Engineers and Mr. Michael Cunniff, Brotherhood of Railway & Airline Clerks. Also, Dennis Clark of the Missouri State Legislative Board, United Transportation Union, and Richard Taylor, Brotherhood of Maintenance of Way Employees.

Who would like to go first?

STATEMENTS OF DENNIS P. CLARK, STATE LEGISLATIVE DIRECTOR, UNITED TRANSPORTATION UNION; LAVON DANNER, CHAIRMAN, MISSOURI STATE LEGISLATIVE BOARD, BROTHERHOOD OF LOCOMOTIVE ENGINEERS; RICHARD TAYLOR, BROTHERHOOD OF MAINTENANCE OF WAY EMPLOYEES; MICHAEL CUNNIFF, DIRECTOR, MISSOURI STATE LEGISLATIVE COMMITTEE, BROTHERHOOD OF RAILWAY & AIRLINE CLERKS

Mr. CLARK. I'll start off, Senator.

Senator DANFORTH. Could you tell us who you are?

Mr. CLARK. Yes. Dennis Clark, State legislative director for the United Transportation Union.

Senator DANFORTH. Who is everybody else, Mr. Clark?

Mr. CLARK. To my immediate left is Mr. Danner, from the Brotherhood of Locomotive Engineers. To my immediate right is Mr. Michael Cunniff, from BRAC, clerks. To his right is Mr. Richard Taylor, from the Maintenance of Way Employees.

Senator DANFORTH. Good, thank you.

Mr. CLARK. Mr. Chairman, as I stated, my name is Dennis P. Clark, and I'm the Missouri State legislative director of the United Transportation Union and the chairman of the cooperative legislative committee, Railroad Brotherhoods of Missouri. I offer this testimony on behalf of the United Transportation Union and its membership's unanimous opposition to the enactment of S. 1844, the Coal Slurry Pipeline Act.

I appear before this committee to voice our concern regarding this subject. It all started some 20 years ago, and we were talking about five pipelines which would result in approximately 20,000 rail jobs. Now, if S. 1844 is passed into law, it would authorize construction of 15 or more pipelines that would create a loss of at least 50,000 rail jobs. This would be a crushing effect on the rail industry as a whole plus the devastating effect it would have on our railroad retirement system.

The DOT testified before the Committee of Interior and Insular Affairs of the U.S. House of Representatives on July 20, 1979, and stated that the railroad industry could handle the present and future coal transportation needs of this great Nation. The OTA report did find that under certain limited circumstances pipeline economics would result in savings beneficial to the coal mine operators, electric utilities, and the pipeline operators. There was never any proof in the 1981 congressional study that there would be a savings to the consumer. The OTA report also strongly indicated that, on balance, legislation promoting construction of coal slurry pipelines would not be in the public's best interests.

Most important to the UTU are those conclusions of the report which indicated the number of jobs in the construction industry, which woud be increased by about 1,000. They would be temporary in nature, as compared with railroad jobs, which would cease with completion of the pipelines. The construction jobs would contribute only temporarily to the region in which they were located, whereas those employed by the railroads normally settled permanently in a particular region, thereby contributing permanently to the development of the community in which they are found. For example, this table shows what the loss of 100 rail jobs means to Kansas City and St. Louis alone.

WHAT THE LOSS [1] OF 100 RAILROAD JOBS MEANS TO A COMMUNITY

[Estimate as of December 1979]

Category	Kansas City	St. Louis
Income taxes—Federal, State, and local [2]	$571,376	$446,264
Food and beverages at home	173,491	239,534
Food and beverages in restaurant	86,587	102,657
Apartment and housing rentals	77,738	82,793
Homeownership (mortgage principal and interest, and property taxes)	466,714	392,151
Home heating fuels and utilities	95,151	121,477
Home furnishings and household operations	118,462	129,177
Men's and boys' clothing	26,800	31,652
Women's and girls' clothing	30,022	39,351
Family footwear	10,149	10,950
Cleaning and shoe repair	6,715	9,410
Transportation (public transportation, automobile purchases, gas, and oil)	307,653	354,654
Medical services and drugs	72,631	79,217
Personal care items (haircuts, hairdressers, etc.)	27,276	28,059
Recreation goods and services (TV sets, movie tickets, etc.)	55,346	53,553
Other goods and services (life insurance policies, funeral services, etc.)	36,792	45,169

[1] Railroad workers' income was based on the December 1979 average weekly earnings (annualized) of a Class I Railroad worker as reported by the Bureau of Labor Statistics (BLS). It amounted to $21,572. The losses were based on the relative importance of each expenditure category in the market basket currently used to produce the Consumer Price Index (for the United States and each of the respective cities). Totals may not add due to rounding.

[2] Federal income taxes were derived by using the BLS spendable weekly earnings formula. State and local income taxes were estimated on the basis of data in the Fall 1978 Intermediate Urban Family Budgets as published by BLS. Railroad retirement contributions amounting to $1,322 (which is in lieu of social security) were regarded as a savings by the workers and were, therefore, deducted from the gross income of $21,572 before computing the figures in this table.

Mr. Chairman, we do not feel that these two wonderful cities in this great State of Missiouri could afford the loss of this magnitude. The testimony and documentary evidence which has been presented to the Congress over the past several years demonstrated that the coal slurry pipelines are not needed. They are environmentally unsound. They represent a specialized, inflexible use of energy. Their construction would contradict established congressional policy of revitalizing the Nations's railroads and would provide private carriers the combined advantages provided private and common carriers without the attendant disadvantages of either. The construction of a coal slurry pipeline would be erroneously expensive and would divert capital from other more pressing needs. This capital would then be used to build a transportation system that is largely duplicative of existing rail systems. The ultimate result would be weaker railroads requiring Federal funds to survive.

Mr. Chairman, I thank you for this opportunity to present to this committee some of the views of the United Transportation Union on this important subject.

Senator DANFORTH. Thank you. Mr. Clark. Mr. Danner?

Mr. DANNER. Mr. Chairman, I would also like to add to Dennis Clark's testimony that there are over 1 million railroad retirement beneficiaries in the United States; 34,000 of them are right here in the State of Missiouri. They stand to lose $60 million per year paid into railroad retirement funds for the loss of every 10,000 railroad jobs. It is estimated, as Dennis has said, that as many as 50,000 railroad jobs would be lost if coal-slurry legislation is enacted, and that is a shocking loss of $300 million annually to our railroad retirement system.

On coal slurry legislation one Congressman's letter to me said:

> Some juridicational problems remain as well as all unresolved questions on the issues, such as jobs, continued rail service, water supply and waste water treatment.

Senator Danforth said:

> I do not believe that pending legislation to facilitate coal-slurry projects should move forward until these issues have been fully examined.

I've read other material and letters that seem to be saying the same thing to me. That is, the remaining issues to be addressed by Congress are going to take time.

I cannot believe there is nearly enough time this session of Congress to fully and fairly examine the issues on coal slurry pipeline legislation.

It has been interesting to note from material that I have read that eminent domain was once officially called compulsory surrender in Scotland; and, as that wording suggests, it is to be used only when there is compelling reason in the larger public good to deprive the landowner of the rights of private property.

The two champions of coal-slurry legislation are both from Louisiana, Senator Johnston and Congressman Breaux. Yet I understand that Louisiana has a tough coal slurry eminent domain law (no Louisiana water can be used). Also, I read where Congressman Breaux was quoted, as saying himself, "If you had to build a pipeline under Louisiana law, it would take 100 years."

Despite substantial opposition, legislation gaining Federal eminent domain authority to coal-slurry pipelines has been moved ahead in Congress this fast.

Pipeline interests are trying to obtain Government guarantees in their financing. I understand one such application has already been submitted. This could mean the bills would be passed on to the taxpayer and also the potential investors are not themselves confident of what proponents are saying on coal slurry being competitive with railroads.

That's all I have, Mr. Chairman.

Senator DANFORTH. Thank you, sir. Mr. Cunniff?

Mr. CUNNIFF. Good morning, Senator. My name is Michael Cunniff. I'm here today representing the Brotherhood of Railway & Airline Clerks in my capacity as director of the Missouri State Legislative Committee. I represent approximately 4,000 employed railway clerks in the State of Missouri. I'm here today to voice my organization's and my personal objections to the proposed coal slurry pipeline legislation as outlined in Senate bill 1844.

If enacted, this legislation could and would have an immediate adverse effect on my membership and for me personally. I'm employed by the Burlington Northern Railroad in Springfield as assistant chief yard clerk. Part of my duties there entail the handling of coal unit trains going to the Southwest Power Plant for the city utilities of Springfield.

Currently on the BN, coal represents 53 percent of the net revenue ton miles generated. Therefore, coal represents a very vital part of our total operations and, of course, the Nation's energy needs. Thus the importance of coal in the daily lives of the members of my craft and others is obvious.

There are today four planned pipelines on the drawing boards in the areas now served by the Burlington Northern. Members of my craft have already experienced severe job losses throughout the State of Missouri and the country due to the present state of the economy. The implementation of slurry pipelines would have a crippling effect on my members, severely jeopardizing the stability of the railroad industry, the railroad equipment supply industry, and the railroad retirement system.

The Congressional Office of Technology Assessment Study recently found that slurry pipelines would provide a flurry of temporary construction jobs, but it would also cause permanent job losses in the railroad industry. It has been indicated that, for every permanent pipeline job created, there would be six railroad jobs eliminated.

Presently, railroad unemployment is running 11 percent. G. Leo Winger, chairman of the Railway Progress Institute, indicated that unemployment in the railway equipment industry is close to 50 percent—that's an approximation of 225,000 people—in his recent address before the Senate Committee on Energy and Natural Resources on S. 1844. The additional projected job losses in the railroad industry of possibly 40,000 to 41,000 would push the unemployment total up to 20 to 21 percent in the industry and totally devastate the railway equipment industry to the point of oblivion. Granted, the 1,400 mile ETSI slurry line would provide temporary employment to a small number of my brothers in the building and construction trades, but I could not condone or justify the permanent job losses that would occur in my craft and other rail crafts.

Moving on to the question of water, the States in the Missouri River Basin—that is Montana, Wyoming, North Dakota, South Dakota, Minnesota, Iowa, Nebraska, Colorado, Kansas, and Missouri—are already experiencing problems with their water supplies. The Missouri Basin States Commission has already found that local water supplies are not adequate for full development of the coal resource area.

The ETSI pipeline already has permits from South Dakota granting the company 50,000 acre-feet a year from the Oahe Reservoir. It has been said that they are negotiating for an additional 20,000 feet from the said reservoir. ETSI currently has permits for 20,000 acre-feet per year of ground water from the Madison Foundation Aquifer in Wyoming. Three other proposed pipelines: Texas Eastern wants 20,000 acre-feet; Power River pipeline wants 20,000 acre-feet; Northeast Energy Co., wants 20,000 to 34,000 acre-feet. Two other proposed pipelines by the Exxon Corp., are projecting a total need of 1.7 million acre-feet annually from the Oahe Reservoir. The estimates of potential recharge to the Madison Aquifer is from 150,000 to 400,000 acre-feet annually. However, the potential water usage, if all of the proposed pipelines are constructed, and using the same formula of the ETSI pipeline, the possible water usage could easily equal 150,000 acre-feet, the lowest estimate of recharge, therefore severely affecting the viability of the Madison formation.

Additional review of studies by the Corps of Engineers and the Missouri Basin States Association would indicate if all the proposed pipelines came to fruition, the cumulative flow of the Missouri River could be reduced approximately 10 to 12 percent. What would be the costs involved in regard to disrupted navigation, municipal water and sewage needs, recreation facilities, conservation programs? What are the responsibilities of the slurry pipeline to the water short areas of the country when the need for slurry water exceeds their projections and more water is needed?

The 1944 Flood Control Act gave birth to the Nation's first attempt at solving its water resource problems through a comprehensive approach to river basin development. The Pick Sloan Plan (phonetic) was designed primarily to provide four basic benefits: Flood control, irrigation, generation of hydroelectric power, and improvement of the navigation in the lower Missouri River. Also benefits to improve municipal and industrial water supplies, land treatment and enhancement, water quality control, conservation of fish and wildlife, and public recreation. What effect would a potential 10 to 12 percent reduction in the waterflow have on these areas? The total environmental impact of such a reduction could not be comprehended in this generation.

Many legal and financial questions exist concerning the ETSI and the other proposed pipelines, and I'm not qualified to expound on those questions, but I'm not sure that there is not an abridgement of the congressional intent of the 1944 Flood Control Act, and specifically the Mahoney-Milliken amendment. There are two. Also the fact of the matter is that water would taken out of the basin area and its use thereof as a means of captive transportation.

Many other questions remain to be answered, such as what would be the potential effect on Missouri agriculture if all of the proposed pipelines are constructed? What must Federal eminent domain powers—why must Federal—excuse me. Why must Federal eminent domain powers be granted to a single service industry? Why must private landowners be forced to relinquish their property when no national emergency or necessity exists in regards to the transportation of a particular commodity when alternate modes of transportation are already available? Why do slurry advocates contend that pipelines are necessary to impose captive discipline on railroads when intermodal and interrail competition already exists? Why is slurry inflation proof when reality proves that costs are not static for any industry over a 20- to 30-year period? Why the rerouting of ETSI around Nebraska? Why did ETSI have so much trouble in Nebraska? Would not the same problems exist in other States? It seems the great State of Nebraska knows something the Federal Government doesn't.

Is the utility consumer or the State taxpayer going to be required to pay through increased utility bills or tax dollars on bond issues for the costs of startup, transmission, construction, and final preparation before he supposedly would receive the purported benefits of said pipeline service? Why did the East Lake Slurry Line to Cleveland fail? It was because unit coal train rates beat pipeline rates, ergo trains were more efficient then and still are now. A recent study by the Congressional Budget Office found the typical unit train is about 40 percent more energy efficient than the typical coal slurry pipeline.

I think I—I think nothing more needs to be said by me except that I would like to conclude my statements with three quotes, two from the Supreme Court Justice, Oliver Wendell Holmes, and one from the Book of Isaiah.

Justice Holmes said: "A river is more than an amenity. It is a treasure. It offers necessity of life that must be rationed wisely among those who have power over it." Also he said: "A railroad from its nature and public responsibilities must be kept a going concern. This is the supreme necessity."

Finally, from the Book of Isaiah, 40th chapter, 8th verse, "The grass withereth. The flower fadeth, but the word of our God shall stand forever."

Senator, if this pipeline legislation passes, I hope future generations do not say that the word was "We should have used the train."

Thank you.

Senator Danforth. Thank you. Mr. Taylor?

Mr. Taylor. Thank you, Mr. Chairman. I don't really have anything to add to what these gentlemen have said here. They pretty well covered what I had to say, outside of I would like to say that the rail industry is already handling the volumes of coal that are being transported now and that the Brotherhood of Maintenance of Ways believes that they have the ability to handle any increase in the volume.

If coal slurry pipeline legislation is passed, we stand to lose thousands of railroads jobs. It could put more railroads in the Middle West, in the same situation as the bankrupt Rock Island, and other railroads would be forced to end service over many of their lines which are made profitable by the coal they hauled.

There are over 1 million railroad retirement beneficiaries, 34,000 of them right here in Missouri. They stand to lose $60 million per year paid into the railroad fund for the loss of every 10,000 railroad jobs.

It is estimated that as many as 50,000 railroad jobs will be lost if coal slurry legislation is enacted: That is a shocking loss of $300 million annually to the RRR fund.

Senator **Danforth**. Gentlemen, thank you very much. What I have been told is that, if five pipelines were constructed, the cost to Missouri in jobs would be 2,800 jobs and an annual payroll of $47 million. Is that about right?

Mr. **Cunniff**. Senator, I think it would be greater than that. At this point, I'll speak personally from my area in Springfield. We have experienced severe job losses, approximating 850 jobs in Springfield. Now, this encompasses all crafts. This is primarily because—Burlington Northern indicates that it's the state of the economy. If the state of the economy is such—in such a bad condition as it is today, what would the proposal of the ETSI pipeline, which they are talking about starting construction in 1983, be, in completion in 1985? This is just 3 years away. What is a normal recovery time on a recession? Here we supposedly would be coming out of recession and then be hit—me, personally, as an employee of the Burlington Northern—with another arrow in our back, in the sense that the trains can handle the coal better that the pipeline.

Mr. **Clark**. Senator, I might add that, in the State of Missouri alone, which is—falls true throughout the United States, we have members with up to 25 years seniority that are not working at the present time because of the economy. With this, God only knows what it would increase to.

Senator **Danforth**. That is not just St. Louis and Kansas City?

Mr. **Clark**. No; it's throughout the Nation.

Senator **Danforth**. It's throughout the State of Missouri. I go into small towns—there are a lot of small towns in this State which are very largely dependent on the railroad.

Mr. **Clark**. I could give you personally, Senator—last year, had I still been working on the railroad, where I have still retained seniority, with 16 years seniority I would not have worked a day.

Senator **Danforth**. Another point you made that is often, I think, ignored in consideration of this, is what does this do to the railroad retirement program?

Mr. **Clark**. As I stated, that is a great concern.

Senator **Danforth**. Mr. Clark and Mr. Danner both made that point, I think, very well. This program, as you know, is one that we have been wrestling with; how do we make the numbers come out right now? I think that you have pointed out very clearly that this would be a major jolt to a very important program, for which we in the Congress have responsibility.

Mr. **Cunniff**. Senator, if I might make one other point in regards to the cumulative effect of unemployment among members of the railroad crafts, there has to be another question asked. What would the results be in regards to health and welfare programs, that these unemployed individuals would have to rely upon, to the total taypayer of the United States? Only you as a Senator can answer that.

Senator **Danforth**. It's too early in the week to think about all of the horror stories—but I think that there is a ripple effect. There's absolutely no doubt about it. The reason that I'm anxious to have these hearings is that this bill was reported out of the Energy Committee very quickly. There was very little opposition to it in the Energy Committee. My concern is that in the waning weeks of this Congress, in connection with something like the debt ceiling bill which has to be passed, somebody will try to just put this on as an amendment in the last few weeks of the Congress; and, unless we focus attention on it quickly, we can cause some real havoc in the country; and that really is the reason for the hearings—both to focus attention and also to gather information necessary to bring it to the attention of the Senate, if this does, in fact, show up on the floor in the next 3 weeks.

Mr. **Clark**. Senator, I would like to say, on behalf of the Brotherhoods here, that we appreciate your stand on this issue and hope that you continue to fight as you have in the past.

Senator **Danforth**. Thank you all very much.

Mr. **Clark**. Thank you.

Mr. **Taylor**. Thank you, Senator.

Senator **Danforth**. Now we have John Brown of the International Union of Operating Engineers.

STATEMENT OF JOHN BROWN, DIRECTOR OF LEGISLATION, INTERNATIONAL UNION OF OPERATING ENGINEERS, ACCOMPANIED BY SAM LONG, BUSINESS MANAGER, LOCAL 101

Mr. **Brown**. Good morning, Mr. Chairman.

Senator **Danforth**. Mr. Brown.

Mr. **Brown**. Mr. Chairman and members of the Senate Commerce. Science, and Transportation Committee, Subcommittee on Surface Transportation: First let me express my appreciation for being given the opportunity to appear before you today.

My name is John J. Brown. I am the director of legislation for the International Union of Operating Engineers. I'm here on behalf of General President J. C. Turner and the union's 425,000 members operating in the fields of mining, manufacturing, construction, transportation, and public employees. I also am accompanied here this morning by Sam Long, business manager of local 101 of the International Union of Operating Engineers, Kansas City, Mo., and Susan Sleazer, who is a part of the coalition that we have worked with for the past 7 years. I also represent today, and it was a matter of who was going to testify, Mr. Chairman, before me and members of the building trade and also the 1,200,000 members of the International Brotherhood of Teamsters, Chauffeurs, and Warehousemen.

Rather than get into testimony as you requested, because I think page upon page of testimony has been submitted. I know Mr. Long would like to spell out what it would mean to him. I know one of the brothers who just left from the brotherhood, except the fact that an American Free Trade Union movement that we are able to express our differences on what is either good or bad for our members. It was brought out that coal slurry came about approximately 22 years ago. I think it was John F. Kennedy's time, President Kennedy, that we first got the concept of coal slurry.

Since that point on, I think you talked about an issue that has been studied to death, whether it be States' rights on water, States' right on eminent domain. Coal slurry, I think, has been done. Of course, the biggest cry has come from the railroads, what coal slurry, you know, will do to them. I guess I find that—even this morning I find a member of a Federal agency, Interior—talk about the disastrous things that is going to happen to the American farmer, and yet I have a statement that I would like to, rather than read, present to you. It's prepared by the American Farm Bureau. It brings out what we call competition about subsidies. Let me read one section about rail subsidies.

> Farmers and ranchers are not ready to swallow whole the railroad point that subsidies have received in nil to the railroad industry. Representative James Floria, chairman of the House Public Works Transportation Subcommittee, was quoted in the Congressional Record as saying "The government has paid $11 million in subsidies for the railroads over the past 5 years alone, while Federal subsidies"—and you're talking about different modes of transportations—"do not exceed four billion."

I would also like to point out that, you know, the railroad industry got its start from eminent domain. They got something that they had for many, many years, and then they choose not to give it to anybody else. In fact, if you look at it over the years, we are talking about a mass of payments out of the Treasury, the rescue of the Northeast Rail System through the creation and subsidation of Congress, revenues derived from land grants of more than 100 years ago in which several carriers were given 128 million acres of Federal land and 49 million acres of State land reprsenting nearly 10 percent of the total land in the United States. So I—it's hard for me to sit here and—as a member of a construction organization, who sees the need for energy—not only construction jobs, and you hear that once these jobs are over—I wonder what the average person thinks the construction worker does when he gets through building pipelines. Die? Fade away? Just disappears from the face of the Earth? We not only build pipelines, Senator, we build water lines, we build gas lines, and we build oil lines; and, yes, we are going to derive a good number of jobs in construction of pipelines, but I think—let's take a look at the energy. They say there is no need? What are we, going to go back to 1973 and 1974, when OPEC put us underneath the gun? We have 500 years of coal that we can develop in this country, and the railroads can't do it. There is no way they can do it. I think they know it. It's a shame you didn't address Burlington this morning and ask them what they are doing with their coal, and ask Burlington, can they say to the Brotherhood they will not build coal slurry pipelines, if they get eminent domain. So there is more than, I would say, you know, two—one or two sides to this picture. It gets kind of complicated.

We hear about the water situation. I find it impossible in my own little mind to believe that we can put a man on the Moon and we still talk about water that has been studied to death almost 20 years. I was fortunate enough to be asked over one time by the AFL/CIO to go to Egypt and Israel, and I see a land in Egypt, you know, still heavily desert, and I look at the land of Israel, and—we talk about aquifers, and there is a small nation that uses pipeline to connect all their major aquifers. One only has to look at what they have done with that land. When we talk about shortage of water in the West, then I would wonder why three House committees—three House committees, not one. This thing just didn't go by over night. There was Interior, there was Commerce, there was Energy. Three House committees passed this bill. There had to be a total of almost 100 Members of Congress took a hard look at this thing for the past 7 years. Then what about the seventh committee in the Senate that passed the bill, and why did western Senators such as Senator McClure and Senator Wallop—they have come out and let the bill go through their committee. Because I think they know that States' rights, as far as water, is protected. So the competition, I think, isn't needed. There is no question what is happening with the railroads under the Staggers Act.

At this point, Sam Long, who is the business manager of 101, I would like to get him into reading part of our statement that we would like to express here this morning.

Thank you, Senator.

Senator DANFORTH. All right.

Mr. LONG. I'm here for selfish motives, myself. I represent 4,000 members in Kansas City, and I'm here also for the building trades.

I heard, you know, one of our brothers from the railroad workers state that this would create 1,000 construction jobs. That is not correct. It would create approximately 100,000 jobs over the long pull. I think what we need to concern ourselves with is competitive environment, and I do not feel like that we have that competition right now. I feel like that the railroads are—they are here for the same reason I'm here, to protect their own selfish interests.

They—one of the railroad people here today testified there was 12 railroads that were involved moving coal. Well, on the way down to this hearing this morning, I heard on the radio that three large railroads were considering merging. I'm talking about the Missouri Pacific, the Western Pacific, and the Union Pacific. That in turn draws the monopoly a little tighter. What I'm concerned with, that they have had a bird nest on the ground for years. I think it's time that there was some competition in the movement of some of these commodities.

I would like to read this—you know, two paragraphs here, and then I will keep it brief.

Construction operation of the seven major pipeline systems currently proposed will require about 100,000 new workers. There will be jobs for carpenters, masons, electricians, ironworkers, operating engineers, pipefitters, and manufacturing jobs to make needed equipment for construction and operation of the pipeline. In addition, S. 1844 contains a buy-America provision, requiring the use of U.S.-produced materials and equipment unless specifically exempt by the Secretary of Energy. This provision insures that the tremendous growth possibilities for businesses providing materials, equipment, and labor for the pipeline projects will enure to the benefits of Americans. For example, the 3-million tons of steel required to build the seven proposed pipelines will require—will provide a big boost to the ailing steel industry.

My friends in the rail labor unions have argued that coal slurry pipelines would cause railroad workers to lose their jobs. We do not believe this will happen. Competition in the coal transportation sector will increase overall coal use from which the railroads and rail labor will benefit. According to the Association of American Railroad Statistics, railroad employment in class I railroads has declined by 107,288 since 1970, even though no coal slurry pipelines were built during this period. So it seems rail workers have identified the wrong villain. If the railroads would allow a little competition for their coal business, simply having a choice would entice more utilities, industrial users, and foreign users to stop using foreign fuels and switch to U.S. coal. The pie would get bigger, and railroad workers, coal miners, and pipeline workers would benefit.

Mr. BROWN. That's our statement, Mr. Chairman.

Senator DANFORTH. Thank you all very much. I think you have done a very good job of presenting the plusses and minuses. There is no doubt that in transportation—I have learned this since I have been in the Senate, and particularly in this subcommittee—there is keen competition between modes of transportation. There is no doubt about that. I thought I heard some of my old arguments in favor of locks and dam 26 being raised again.

Mr. BROWN. Senator, you took the words right out of my mouth. There was nobody, I guess, greater opposed to locks and dam 26 than the railroad industry. It's a part of the waterway users who do a tremendous job for the United States. I just find it hard to believe that only railroads and railroads alone can move coal, can move grain, or move anything else. You know, the very thing that we are talking about was said when oil pipelines were built. Heck, if you go back in American history, you will find that you come up to an oil line, it stopped at the railroad, they put the oil on the dumper and transfer across to the other side.

This country, this great Nation of ours, just wasn't built in that kind of thinking, that narrow tunnel vision, that "Only I and I alone." Under the railroad Staggers Act, you look at what is happening. You look at tremendous increase in the transportation of coal because of the lack of competition. Now, they can use the word any way they want, but competition is still competition, whether you are in a ball game or whether you are moving coal, either by rail or a pipeline.

Senator DANFORTH. OK. Well, thank you all very much for being with us.

Mr. BROWN. Thank you, Senator. Senator, do you want this submitted to you? It's from the Farm Bureau.

Senator DANFORTH. Thank you very much. We'll keep that in the record.

[The statement follows:]

STATEMENT OF JOHN BROWN, DIRECTOR OF LEGISLATION, INTERNATIONAL UNION OF OPERATING ENGINEERS

Mr. Chairman and members of the Senate Commerce, Science, and Transportation Committee's Subcommittee on Surface Transportation, let me express my appreciation for being given the opportunity to appear before you today.

My name is John Brown. I am Director of Legislation of the International Union of Operating Engineers. I am here on behalf of General President J. C. Turner, and the union's 425,000 members, operating in the fields of mining, manufacturing, construction, transportation, and public employees. I am also representing the AFL-CIO Building Trades Department, as a member of their Executive Council. We welcome the chance to speak to this subcommittee and express our strong support for S. 1844, The Coal Distribution and Utilization Act of 1982.

We have testified in support of legislation granting the right of federal eminent domain for coal pipelines for the last five years. Our support is primarily based upon two reasons: jobs to put our people to work, and the increased energy security for this country which coal slurry pipeline technology will bring.

GREATER COAL USE

The United States has 475 billion tons of known coal reserves, enough to meet coal energy needs for some 500 years. The U.S. produced 802 million tons of coal in 1981, exporting about 110 million tons and using the rest mainly for fuel to produce electricity for this country. Coal production is expected to increase to 1,480 million tons in 1995, with coal exports increasing also.

Increasing coal production and burning more coal in utility power plants is a beneficial goal for this country in many respects. First, developing and utilizing this abundant natural resource requires more American workers: in the coal mines, in manufacturing earthmoving and mining equipment, and in the transportation sector. For example, the Operating Engineers currently work in surface mines, and about 6,000 new operators will be needed in coal surface mining to handle the additional growth and replace retiring workers. Second, this country, because of its coal reserves, can become energy self-sufficient by replacing imported oil with coal in utility generators and therefore ensure that the U.S. will never again be in the vulnerable position it was in when OPEC curtailed oil supplies in 1973. Third, by exporting more of our coal to other countries, the U.S. will enjoy a more favorable balance of trade and a healthier economy.

THE IMPERATIVE: COMPETITION

Increased coal production will not happen automatically. Given the fact that the cost of transporting coal is as much as, and often more than, the cost of mining the coal, potential users of U.S. coal are as sensitive to transportation costs as they are to mining costs. A business contemplating using U.S. coal in its generating facility or industrial boiler must be assured of a reliable supply of coal at a stated delivered price, which includes the cost of transportation. Currently, this assurance does not exist.

The railroads transport far more coal today than barges and trucks combined. In fact, 85 percent of all coal shipped by rail has no alternative mode available. The dominant position of the railroads, plus the freedom to set railroad rates without approval by the Interstate Commerce Commission under most circumstances, has enabled the railroads to charge excessive rates for shipping coal without fearing loss of the business. Increased coal use was dealt another blow when a federal judge, in August of this year, held that so-called "letters of agreement" between the Burlington Northern and Kansas Power and Light specifying rates for shipping coal were illegal, paving the way for the BN to unilaterally raise its rates. This case has implications for many utilities, including Kansas City Power & Light.

The Staggers Rail Act, which substantially deregulated the railroads, was passed by the Congress in 1980 with the intention of having competition replace regulation as the mechanism for keeping rail rates reasonable. But presently there is no competition and U.S. coal is not being effectively utilized.

Coal slurry pipelines can provide the needed competition, serving users like utilities and for shipping coal to U.S. ports bound for foreign markets. Pipeline sponsors believe that they can transport coal cheaper than do unit trains, especially over long distances. However, the true test will be the marketplace, as pipelines and railroads compete for the coal transportation business. Coal pipelines will be financed entirely with private capital, and thus they will succeed or fail on their merits. But as twenty years' experience shows, coal pipelines will not be built without federal eminent domain authority. S. 1844, and the companion bill in the House of Representatives, authorizes that needed eminent domain.

How would competition in the coal transportation sector change the present situation? With different transportation modes competing for the business of shipping coal to a utility's coal-fired generating facility, for example, the utility will be in a position to negotiate a cheaper rate and favorable terms in order to supply its customers with low-cost, dependable electricity. This will encourage utilities to convert their oil-fired power plants to coal-fired power plants, and encourage the construction of new coal-fired plants. Competition can also reverse the trend that now finds some utilities turning to coal imported from South Africa, Poland, and Columbia, because importing coal will no longer be cheaper than shipping coal from U.S. mines. Greater utilization of U.S. coal will put more Americans to work and contribute greatly to this country's energy security.

Construction and operation of the seven major pipeline systems currently proposed will require about 100,000 new workers: jobs for carpenters, masons, electricians, ironworkers, operating engineers, pipefitters and manufacturing jobs to make needed equipment for construction and operation of the pipelines. In addition, S. 1844 contains a "Buy America" provision requiring the use of U.S.-producted materials and equipment unless specifically exempt by the Secretary of Energy. This provision ensures that the tremendous growth possibilities for businesses providing materials, equipment, and labor for the pipeline projects will inure to the benefit of Americans. For example, the 3 million tons of steel required to build the seven proposed pipelines will provide a big boost to the ailing steel industry.

My friends in the rail labor unions have argued that coal slurry pipelines would cause railroad workers to lose their jobs. We do not believe this will happen. Competition in the coal transportation sector will increase overall coal use from which the railroads, and rail labor, will benefit. And according to the Association of American Railroad statistics, railroads employment in Class I railroads has declined by 107,288 since 1970, even though no coal slurry pipelines were built during this period. So it seems rail workers have identified the wrong villian. If the railroads would allow a little competition for their coal business, simply having a choice would entice more utilities, industrial users, and foreign users to stop using foreign fuels and switch to U.S. coal. The pie would get bigger, and railroad workers, coal miners, and pipeline workers would benefit.

Coal pipelines are based upon a proven technology, the first one operated in England during World War I. But use of this technology has been thwarted in the U.S. because they cannot be built without federal eminent domain power. Scientists are researching new, efficient, clean uses for coal be developing and testing new technologies which are compatible with coal slurry pipelines. For example, the Department of Energy, the Electric Power Research Institute, Atlantic Research Corporation, and other companies are currently spending millions of dollars researching and testing a new technology of burning a coal-water mixture directly in boilers presently designed to burn oil. The fuel has a low-ash content and would be about one-fourth the cost of oil for equivalent heating value. Companies are also researching the feasibility of transporting eastern coal through a coal pipeline to a single point mooring system for vessel loading for shipment to Western Europe. Since coal slurry pipelines transport a coal-water mixture, construction of coal pipelines can be significantly encourage further research into, and indeed the commercial viability of these new technologies. This will lead to new jobs and to the development of innovations which can be sold and shared with other countries.

Thus it is obvious that the projected 100,000 new jobs which construction of the seven major planned pipelines would require is an understatement if one takes into account the workers which will be needed to develop technologies now being researched for increasing coal's versatility and marketability. But this burst in technological innovation, jobs, and energy security depend upon competition for the transportation of coal and the assurance of reasonable rates which competition facilitates.

CONCLUSION

S. 1844 takes nothing away from railroads except the privilege of having a monopoly and subverting this country's goal of increased coal use. The U.S. has an energy source that will last for upward of 500 years, that can give us energy security, that we can develop with our own workers and transport with our own skills to light and heat homes and produce goods in our factories. Pipelines are invisible, noiseless and safe. They do not pollute, cause range fires, block traffic for long periods or create hazards at grade crossings. The members of the International Union of Operating Engineers and I urge the subcommittee Members to give careful consideration to S. 1844, and the many benefits which construction of coal pipelines will bring.

Senator DANFORTH. I think Attorney General Ashcroft is with us. We are glad you are here.

STATEMENT OF JOHN ASHCROFT, ATTORNEY GENERAL OF MISSOURI

Mr. ASHCROFT. Senator—Jack—it's a pleasure to be here, and I thank you for this opportunity of commenting.

The diversion of river flows is a vital concern to States such as Missouri, and it's a State interest that I speak of and represent. Our State has 553 miles of the Missouri River in or adjacent to it. More than 60 percent of all Missourians live in counties bordering on it, and many depend on it for drinking water, recreation, waste assimilation, and jobs in the navigation industry and agriculture. If the diversions are eventually authorized, they should only occur after all existing legal requirements are met and adequate determination is made that surplus water would be available now and in the future, and that such use would not adversely affect authorized and protected uses of such waters, both present uses and future uses.

In my opinion, the bill granting Federal eminent domain power to coal slurry pipelines would result in a radical restructuring of water use, not for energy development but for the purpose of transporting a single commodity, coal. However, this transportation use is not even as energy efficient as existing transportation means such as railroad and bargelines. Thus Missouri and many other downstream States, downstream from a coal slurry pipeline, would find water which would otherwise be available for traditional and beneficial uses instead being taken for inefficient transportation uses with little or no benefit for the river basin as a whole.

S. 1844 provides protection for States of origin or for States of terminus for coal slurry pipelines. Mere downstream States find no provisions which would assure that upstream diversions would not cause unacceptable deletion or depletion of vital river flows. When one examines provisions purporting to protect States at each end of the pipeline, even they are illusory. An example is in section 3 of the apparent deference to State laws governing the access to water. However, this section does not apply, quote, "where application of such State laws and procedures would prohibit such access."

Section 7 of the bill purports to defer to State laws pertaining to location, construction, operation, or maintenance of an interstate pipeline distribution system, quote, "except where such applicability would have the effect of prohibiting the location, construction, operation, or maintenance of the interstate coal pipeline distribution system."

It's pretty clear that States are allowed, according to S. 1844, to do only what the State could do in not prohibiting the location, construction, or operation or maintenance of a pipeline, and the deference to the State, and leaves the State with an ability to do little or nothing.

My concern here today is that the rights of States that share water resources are not sufficiently protected by S. 1844. Furthermore, recent amendments proposed by Senator Wallop only purport to protect the State in which the diversion takes place, not the downstream States. This lack of protection to downstream States will perpetuate the destructive effect of the Department of the Interior program to market Missouri River water. As a result of this program, Federal agencies are either actively marketing Missouri River flows with no consideration of adverse effects or are shirking their responsibilities to prevent such adverse affects.

Legislation such as this, which sponsors a radical new water use, can only encourage Federal agencies to ignore further existing law and rights of States like Missouri. The agencies, in their eagerness to market the Missouri River, will use this bill as carte blanche to give coal slurry pipelines preferential treatment. It must be made clear that the use of the Missouri River for a coal slurry pipeline cannot be equated with or given priority over beneficial water uses long recognized and protected by congressional action, dating from at least the 1944 Flood Control Act.

I also question the propriety of granting Federal power of eminent domain to coal slurry pipelines when there is a groundswell of popular support to reduce the involvement of the Federal Government in what are traditionally State issues. In fact, the Reagan administration has told the Senate Committee on Energy and Natural Resources that it would not support the extension of Federal powers of eminent domain for such pipelines.

It's clear that the rivers of this State are natural resources of the State. Passage of this bill will have an adverse and permanent effect on the citizens of Missouri. Communities along the Missouri River rely upon that water for their water supply, both for drinking water and sewage treatment. Farmers rely on it for irrigation and for the transport of their goods. Industries are not—industries are equally dependent upon that water. Powerplants are cooled frequently in their power generation functions. If further diversions are permitted, the electrical power generation stations could be adversely affected. No adequate study has been made to determine whether the depletion of water would adversely affect nuclear powerplants with regard to the cooling requirements of such plants.

The coal slurry pipeline would further deplete the water reaching Missouri, and the economics of such a pipeline are subject to considerable debate. These problems must be viewed in the context of recent history of low levels in the Missouri River. As recently as last year, the river was closed to barge traffic for 3 weeks. The experience with the coal slurry pipeline in South Dakota indicates that those types of companies should not be given the power of eminent domain as proposed in this bill.

The environmental impact statement prepared for the project discussed the use of subsurface water and merely mentioned the Missouri River as an alternative source. However, the river is now the source for the pipeline, and the Federal agencies executed the contract and granted permits based on the incorrect and incomplete environmental impact statement. This action was taken even though there has been no study that indicates that there is adequate water in the Missouri River to meet present users and uses of the river.

There has been an extremely limited amount of information developed in regard to coal slurry pipelines which would justify the use of the Missouri River for such a pipeline. A February 1982 Congressional Budget Office Report shows that the transportation of coal by railroad and barge is much more energy efficient than slurry pipelines. A March 1978 study by the Office of Technology Assessment stated that coal slurry pipelines' use of water will threaten agriculture and jeopardize future development of some regions in the basin.

Despite the fact that the available information indicates that these pipelines are not energy efficient nor environmentally sound, the two Federal agencies responsible for protecting the Missouri River have rushed headlong into executing contracts and granting permits for such a pipeline despite protests from Missouri and her sister States of Iowa and Nebraska; and you know we have filed suit to curtail this effort made by the Federal agencies.

The overall effect of Senate 1844 on water resources will be disastrous. This legislation will complicate the abilities of the States to resolve interbasin and interstate water issues. Federal programs to market the Missouri River with no present basis in law or fact will continue and even accelerate. States' rights over their most important natural resource, water, will be placed in jeopardy. Further, other rivers may be the subject of attempted water diversions.

The report of the Senate Committee on Energy and Natural Resources listed eight other coal slurry pipelines that had been proposed, five of which would be over 1,000 miles in length. The water necessary to implement these pipelines would be enormous. Three of these pipelines originate in Montana or Wyoming and are comparable in size to the proposed ETSI line to originate at Gillette, Wyo. These pipelines may wish to draw further from the Missouri River and further deplete the water getting to downstream States. Each project would have its own evironmental project—problems, and would deprive people in States of their present beneficial uses of surface and subsurface waters.

To pass a bill granting the tremendous power of eminent domain to coal slurry pipelines would be an endorsement by Congress of an untried and dangerous water-intensive method of transportation to private entities which have not indicated any real concern for the other needs for water, nor have Federal agencies charged with the responsibility of protecting those other uses of water properly met their responsibilities. Hopefully rivers that pass through several States can be managed in a more efficient and equitable manner without continual recourse to the courtroom for every project such as the ETSI coal slurry pipeline.

Now, these issues are complex and too difficult to be complex in the 30 lines of section 5 of S. 1844 which purport to—which purport but fail to adequately preserve State water law. With the present transportation capacities of this Nation, special consideration should not be given to a radical and destructive new water use which can only hurt those citizens, industries, economies, and resources that depend on river flows of this Nation.

Senator **Danforth**. Thank you very much. John, you, together with Iowa and Nebraska, filed a lawsuit. If this bill were the law, what effect, if any, would that have on your likelihood of success in the lawsuit? First, would you just tell us briefly what the lawsuit does?

Mr. **Ashcroft**. The lawsuit challenges a number of facts. One, the authority of the Department of the Interior to grant the permits it has. We believe that the Flood Control Act of 1944, I believe that's the right date on the act, does not give them that authority. Second, we challenge the adequacy of the environmental impact statement, which did not target on the Missouri River as a source for water. The environmental impact statement had targeted a subsurface water in Wyoming, a brackish water there, as the lubricant for the slurry. Only after the comment period had expired for the EIS was an announced switch made for the other water.

Those are the basic sort of efforts that we are targeting. We are also challenging the use of the water as being in nonconformity with the Flood Control Act of 1944, and I believe it's called the Water Resources Act of—Water Supply Act of 1958. That perhaps is one of the most important of the things related to this bill, because the Water Supply Act I believe requires that significant changes in the use of the resource of the main stem Missouri would require congressional approval. That's one of the points in the lawsuit.

If this bill were to be enacted, which designated pipelines as a beneficial use for the water, it would be arguable that that congressional change in the beneficial uses had been made and that it would authorize pipelines out of the main stem of the Missouri, and I believe it would be arguable, then, that it had seriously eroded one of the points in Missouri's lawsuit.

Senator DANFORTH. All right. Now, I just want to make the record clear on this, because my friend, Senator Abdnor, called me up as soon as the suit was filed and asked me what I was doing to his State and so on. I want to make it absolutely clear for the record, did you and I consult in any way about the filing of that lawsuit?

Mr. ASHCROFT. No, sir.

Senator DANFORTH. OK.

Mr. ASHCROFT. I filed the lawsuit in the interests of the people of the State of Missouri——

Senator DANFORTH. I happen to be one of them, and I wish you well, but we had no consultation whatever; is that correct?

Mr. ASHCROFT. That is correct. I did consult with Nebraska and Iowa, who are similarly disadvantaged and threatened by the action that is arbitrary and taken by the Federal Department of the Interior, and they—I consulted with them, but not with you, Senator.

Senator DANFORTH. Now, the bill, as I understand it, and this is emphasized in the committee report, provides for the primacy of State water law. Just reading from the committee report, it says: "The major provisions of S. 1844 as reported would," and then No. 4, "establish the primacy of State water laws relating to the control, appropriation, use, disposal, or distribution of water, and the protection and enforcement of water rights with respect to water used in interstate coal pipeline distribution systems." Doesn't that solve your problem?

Mr. ASHCROFT. No; it doesn't. I think my testimony pointed out that the State law would be primary and would take precedence until it ran into the S. 1844, and the 1844 excepts a number of important State potentials in regulating it. Let me just go back to them in my testimony here, if I can find that place for a second.

When one examines the provisions purporting to protect States at the end of the pipeline, and basically the States protected are those at the beginning and end of the pipeline, and since Missouri is not even on the route of the pipeline that leaves—raises serious questions about protection for us. I believe even those at the beginning and end of the pipeline are protected in what I would call an illusory protection. It says that the section does not apply where application of State laws and procedures would prohibit access to the water, so the State law can prohibit these things as—only to the extent that it doesn't prohibit them.

Senator DANFORTH. So you think it's just a sham?

Mr. ASHCROFT. Well, I testified before Senator McClure's committee against the proposal, and there is a significant group of individuals who have a sentiment that States ought to be able to protect their interests. I do believe that the items were added to the bill to try and create an appearance that there is such a protection, but I do not believe State interests are adequately protected in any respect.

Senator DANFORTH. If, for example, South Dakota wanted to sell off large amounts of water, small amounts of water, whatever, Missouri, in your view would be powerless to do anything about that?

Mr. ASHCROFT. Well, we would be in the same circumstance we are now, except we might even be further disadvantaged, depending upon the—on whether courts viewed 1844 as expanding the beneficial uses.

Senator DANFORTH. OK.

Mr. ASHCROFT. I think the lgislation is threatening to the rights of the State of Missouri to demand a continued flow which is adequate to serve the needs of this State.

Senator DANFORTH. What is the status of the lawsuit now?

Mr. ASHCROFT. We filed the lawsuit about 3 weeks ago, 4 weeks ago; and a response is being awaited from the other parties.

Senator DANFORTH. Is this an original case in the Supreme Court?

Mr. ASHCROFT. No. We are suing two Federal agencies, the Department of the Interior and the Army Corps of Engineers. The case is styled the *State of Missouri, Iowa, and Nebraska* v. *Col. William N. R. Andrews,* a general from the U.S. Army Corps of Engineers, and officials in the Department of the Interior, including James Watt, Secretary of Interior. It's in the Federal district court in Nebraska.

Senator DANFORTH. Well, thank you for being with us today. I very much appreciate it.

Mr. ASHCROFT. I appreciate the opportunity of expressing these concerns.

Senator DANFORTH. Thank you very much.

Next we have Joseph Pepper, Missouri Farm Bureau.

STATEMENT OF JOSEPH PEPPER, MISSOURI FARM BUREAU

Mr. PEPPER. Good morning, Senator.

Senator DANFORTH. Good morning. Well, Mr. Pepper, your organization has been quoted already; do you stand by that quote?

Mr. **Pepper**. I didn't exactly agree with the quote the man made. I believe he did quote from a statement issued by the American Farm Bureau and not the Missouri Farm Bureau, of which we happen to be affiliated; but I would be interested to see that in the form of a resolution. Sometimes you do talk out of both sides of your mouth in order to insure your point, though.

Senator, this morning I would like to address you. As I said, my name is Joe Pepper. I'm a farmer here in Platte County and the State of Missouri and am a member of the Farm Bureau Board of Directors of the State of Missouri. I appear before you this morning on behalf of its membership.

Our policy regarding the coal slurry pipeline as adapted by our voting delegates and member State Farm Bureaus at the American Annual Convention this past January of 1982 states "Federal legislation dealing with coal slurry pipelines should," and the following three points: "Respect State water laws, respect State laws concerning property rights in eminent domain procedures, and provide that a State which has a water compact with another State shall receive credit for the amount of water that is transported to that other State in a coal slurry pipeline."

It is the Farm Bureau's opinion that Federal legislation is not necessary to allow a coal slurry pipeline, as most of the pipeline interests are already free to charge such installations. It is because of opposition on the State and local level that pipeline builders are seeking Federal eminent domain legislation that has currently been the big controversy in Washington and recently both in the House and Senate.

In our estimation, such legislation should require farmers and ranchers to surrender their property, pipeline builders with compensation, whatever it might be, as set forth by Federal courts, and not through the marketplace. We believe State legislators and State courts would be barred from interfering with such legislation if it were successful.

Our organization, which very much agrees with the President and the administration on strongly opposing such compulsory surrender, and—I wanted to point out that Federal eminent domain would violate the rights of individual States to judge the impacts and their needs.

It is great concern to our organization and many other groups, the issue of scarce water. We have been told it takes up to 1 ton of water to move 1 ton of slurry pipeline in the arid Western States as well as a number of Eastern States who recently—experienced recent water shortages. Water conservation is a serious business.

As has already been pointed out, the coal slurry pipeline project seeks to take by contract only 15 billion gallons of Missouri River water annually. We grant this amount of water would not likely result in severe shortages for downstream States such as Nebraska, Missouri in the years ahead unless we had severe drought conditions comparable to those in recent years of 1979 and 1980. If a similar drought were to persist for several years, we are almost certain to have very imited barge business, particularly in the upper Missouri River basin. We would definitely impact the price of grain that farmers would receive in my area as well as others and further upstream. Mr. Chairman, we can't afford to take that chance.

Of equal concern, if the coal slurry pipeline project were approved, what assures we do not have similar projects not already approved at a later time and point and someday that the mighty Missouri River, in it's 500 and some 33 miles of length, would be reduced to maybe a mere trickle? We also know that 60 percent of all Missourians living in counties bordering the Missouri River are dependent upon it for it drinking water, along with recreation, water assimilation, and other agricultural purposes.

In conclusion, Mr. Chairman, we would be very hopeful that Missouri and other States bordering the Missouri River can conform and make an effective compact in the water future that would help clarify Missouri River water rights. In the meantime, we would urge Members of Congress to refrain from clouding this very sensitive issue, an important issue, by passing Federal legislation that would expedite the completion of the pipeline and diversion of the Missouri River water.

Thank you, sir.

Senator DANFORTH. Mr. Pepper, thank you. Your organization has taken a very keen interest in matters relating to transportation because of the importance of transportation to the farmer. Have you looked at the possible effect of coal slurry pipelines on rail transportation and what such an effect, if any, would mean to agriculture?

Mr. PEPPER. To the best of my knowledge, no, sir.

Senator DANFORTH. Would it be correct of me to say that rail transportation is crucially important to agriculture——

Mr. PEPPER. It would, sir.

Senator DANFORTH [continuing]. And that when, for example, the Rock Island Railroad is no longer operating, that has a very severe effect on agricultural economics?

Mr. PEPPER. Yes, sir, very much so.

Senator DANFORTH. Therefore, if it would be true that the railroads would recover their operating costs lost from coal revenues by increasing the costs to farmers, that would obviously have an effect on agriculture?

Mr. PEPPER. It would seem very likely to, yes, sir.

Senator DANFORTH. Do you need any more problems right now?

Mr. PEPPER. Not that I can think of. We are loaded up.

Senator DANFORTH. Thank you very much for being with us.

Mr. PEPPER. Yes, sir.

Senator DANFORTH. Next, Mr. Les Barrows of MFA.

STATEMENT OF LES BARROWS, VICE PRESIDENT FOR PUBLIC AFFAIRS, MISSOURI FARM BUREAU

Mr. BARROWS. Mr. Chairman, I'm Les Barrows, vice president of public affairs for MFA, Inc. MFA is a farmer-owned cooperative serving farmers in Missouri and seven or eight adjacent States. We appreciate your holding this hearing in Kansas City, making it possible for more Missourians to speak on a resource that is so vital to our State.

An article by Kathy Meyer in the April 1982 issue of Today's Farmer Magazine,[1] which I think you have a copy of, has given a real good overview of problems associated with diversion of the upper Missouri River.

MFA markets grain and livestock for our members and supplies them with input such as fertilizer, feed, and other farm production inputs. An efficient intermodal transportation system is essential for the timely movement of grain and oilseed products into domestic and export markets as well as for hauling of fertilizer over thousands of miles to farmers within the midcontinent area.

Therefore, we view with alarm the granting of Federal powers of eminent domain to coal slurry projects as approved by committees within the U.S. Senate and House. The development of coal slurry projects would be detrimental to both barge and rail transportation systems.

Coal is the leading commodity hauled by railraods and is their major source of revenue. If coal slurry pipelines should proliferate, it would adversely affect the railroads and likely result in additional abandonment of rail lines. Many farmer-owned elevators located on the abandoned lines would be placed at a great disadvantage as grain and fertilizer would then have to be hauled by trucks. In many cases, the elevators would be forced out of business when the rail service is discontinued. In any case, farmers would lose because of the higher transportation costs, costs which they cannot pass on to the buyers of their products. Large numbers of midcontinent farmers have already suffered economic losses associated with rail abandonments. We oppose actions which would add to these numbers.

Proliferation of coal slurry pipelines would also be detrimental to the barge industry. The normal season for barge traffic on the Missouri River is from April 1 to December 1. In dry years, the season is shortened because of reduced river flow. If large amounts of river water are diverted from the upper Missouri River, a shorter barge season would then become the norm. Again, farmers would suffer economic losses as they divert to more expensive forms of transportation for the hauling of their grain to market.

Instead of taking actions which would reduce the flow of the Missouri River, action should be taken to effectively increase its flow by providing channels of 9 feet in depth instead of the present 8 feet. The deeper channels would greatly increase the tonnage of barge transport on the Missouri River.

Specific actions which we recommemd are, one, prohibit the granting of Federal powers of eminent domain to coal slurry projects: two, prohibit the Corps of Engineers from building diversion projects which would divert water from the Missouri River: three, prohibit States from selling Missouri River water for use outside the Missouri River Basin; and, four, continue funding of the Missouri River Basin Commission and grant it authority to establish priorities for future use and to mediate, perhaps along with a Federal co-mediator, among the competing States.

Mr. Chairman, we believe that if our recommendations are adopted, more will be achieved than the avoidance of problems associated with the diversion of Missouri River water. Positive steps will have been taken to help make this valued resource more fully reach its potential.

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[1] See p. 166.

Thank you for permitting us to present the views of our MFA member patrons.

Senator **Danforth**. Thank you very much. I think that one of the good things about a hearing like this is that it has shown the effect on our State—and our State really is a transportation State. We are blessed with both water and rail transportation, and we are somewhat of a crossroads of the country, and major sectors of our own economy are dependent on excellent tranportation.

I do not want to fall prey to undue parochialism. However, the most likely coal slurry pipeline is the ETSI pipeline. That would go from Wyoming to Arkansas and Louisiana. Therefore, it would be of zero benefit to the people of Missouri, As a matter, if it is as great a deal for Arkansas and Louisiana as it is claimed to be, it would seem that it would make those States reasonably attractive for industry to move into, and it would accelerate the flow of economic power from the Frostbelt to the Sunbelt, and it would seem to me to be harmful to our people.

Here we have a case where the most likely pipeline to be built would perhaps cause injury to rail transportation; and, if causes injury to rail transportation, and the consumers of rail transportation are paying for it, the result of that is that is that the State of Missouri, in essence, would be subsidizing Arkansas and Louisiana—and Louisiana, in particular, is doing pretty well as it is, so that is something that doesn't exactly appeal to me.

I think you have done a very good job of pointing out the need of agriculture for good water and rail transportation. I also think you have pointed out that the coal slurry pipeline has absolutely no positive effect on either water or rail transportation insofar as it affects the farmer.

Would you just say one word about what happens to agriculture when rail transportation is interrupted or when a railroad goes under? What was the effect of the Rock Island situation, just as an example?

Mr. **Barrows**.Well, I'm not as familiar with the Rock Island situation, and I have only been there for a year; but I do know it had serious implications for our feed mill in St. Joe. This was the short spur, I guess, that ran over into Kansas. This simply meant that we had to bring all of our feed in by truck, ingredients, rather than by rail. They were able to get some other company to switch it temporarily, but I think that has expired also now.

I did some quick checking before I left the office on Friday, and just with the Burlington Northern alone, 1, 2, 3, 4, 5—about 6 locations, six spur lines in the State, which involves about 20 of our elevators, have either filed an intent to abandon those lines, have been approved for abandonment, or are in some other stage of abandonment proceedings, so it would have serious implications for our—these country elevators.

Senator **Danforth**. Mr. Barrows, thank you very much for being here.

Mr. **Barrows**. Thank you.

Senator **Danforth**. Next we have Mr. John Tuepker of the Missouri River Public Water Supplies Association.

JONATHAN TUEPKER, PRESIDENT, MISSOURI RIVER PUBLIC WATER SUPPLIES ASSOCIATION

Mr. **Tuepker**. Good morning, Mr. Chairman.

Senator **Danforth**. Good morning. Have I pronounced your name correctly?

Mr. **Tuepker**. Very closely. It should be spelled T-i-p——

Senator **Danforth**. Tuepker.

Mr. **Tuepker** [continuing]. And then everybody could pronounce it.

Senator **Danforth**. All right, thank you.

Mr. **Tuepker**. Certainly I can subscribe to many of the things previous speakers have stated. Let me go through briefly a prepared statement.

My name is Jonathan Tuepker. I am vice president of production and system operations for the St. Louis County Water Co. I am also a graduate civil engineer with a master's degree in sanitary engineering and am currently serving as president of the Missouri River Public Water Supplies Association. This association is a not-for-profit corporation founded in 1961 as a successor to an informal committee of water utilities which was established in 1956 for purposes for procuring data useful and necessary for enlisting public action toward the preservation of the Missouri River as a public water supply. The Missouri River Public Water Supplies Association represents 13 water utilities from Omaha, Nebr., to the mouth of the river, which use the Missouri River as a source of water supply. These utilities serve a population of approximately 3 million people. My company, the St. Louis County Water Co., is one of the 13 utility members of the association and serves approximately 1 million people potable water in the suburban St. Louis area.

I am here today representing the Missouri River Public Water Supplies Association to present testimony regarding possible diversion of Missouri River water for use to transport coal in a slurry pipeline.

The Missouri River has historically served from both a quantity and quality standpoint as an excellent source of public drinking water supply. However, as demands for additional uses of the river increase, we cannot be assured of continued ample quantity or high quality water. This problem is not new to public planners or responsible water supply engineers.

Dr. Warren Kramer, former chief, public water supply, Missouri Division of Health, wrote in 1959:

> Viewing the Missouri River from the Division of Health standpoint one must consider two major factors, namely quantity and quality. Because of the great number of cubic feet per second of flowing water, even at minimum velocities, one is inclined at first glance to consider quantity lightly. Upon closer investigation, however, we find that such questions as the following are being asked: Will there be enough water for public use? Hydro-electric power? Irrigation? Navigation? Water pollution? With these controversies now prevailing on the availability of sufficient water to meet such fundamental uses we look again at potential quantity.

The same questions need to be asked today and the same answers must be given. To the question that no one would notice the relatively small quantity of water (16 billion gallons per year) to be diverted from the river for use in a coal slurry pipeline, one must consider this a potential impairment to the possible public health of the approximately 3 million people who depend upon this river as a source of their water supply.

The problem most prevalant to water purveyors using the Missouri River as a source of supply is that of the occasional taste and odor occurrences from unknown sources which cause concern to our consumers. These taste and odor causing substances may be from naturally occurring material or from nonpoint and/or point sources of pollution. The lesser the dilution effect, the greater impact these substances have on the quality of the water.

For this reason the Missouri River Public Water Supplies Association opposes the current proposed sale of water for use in coal slurry pipelines or any diversion of Missouri River water.

The association makes the following observations:

The proposed sale by itself would:

1. Probably not be noticed by any member utility of the Missouri River Public Water Supplies Association as far as quantity of flow;
2. The lower river levels would not cause water intake problems;
3. However, under certain conditions, the quality of water may be affected, and
4. Three million consumers of potable water may incur increased cost due to deterioration of water quality requiring increased treatment costs.

Based upon these observations the association then asks:

1. Is the coal slurry pipeline the most efficient means of coal transport? Or, is the use of trains more efficient to transport coal or, is the use of carbon dioxide (CO_2) as a medium for transporting coal a more efficient means of transporting a coal slurry than water slurries? This was reported in the June 1981 issue of Chemical Engineering as a most promising and very efficient means for coal transport.
2. Second, should river water be used, what happens to the water when the coal reaches its destination? What will be the pollution problems created by the disposal of the water? Those of us treating colloidal suspensions realize the significance and cost to this problem and also ask, what energy impact would be required to treat this water after reclaiming the coal?

The Missouri River Public Water Supplies Association concludes by maintaining present flows, the river can be prevented from further deterioration. For these reasons the Missouri River Public Water Supplies Association must object strenuously to the diversion of Missouri River water for any purposes, until minimum stream flows for projected beneficial uses are established and the amounts potentially available for future out-of-stream uses are determined; and request that the river flows be maintained at the highest possible level to insure always an ample quantity of good quality water available in the river. We do not need to let the Missouri River be abused as the Colorado River has been.

I wish to thank you for the opportunity to appear before you today, requesting that in the final determination regarding any type of diversion of Missouri River water, all alternatives will be carefully weighed, including the impact of diversion on water suppliers before such determination is made.

Senator DANFORTH. Mr. Tuepker, thank you. Let me ask you about the environmental risks, if any, of a coal slurry pipeline. Do they break?

Mr. TUEPKER. Well, I haven't seen a pipeline yet that didn't break at some time, and I speak from experience with about 3,000 miles of pipeline in our water system.

Senator DANFORTH. Would that pose an environmental problem, if a pipeline were to break?

Mr. TUEPKER. I'm sure it would, and I think the only answer to that would be dependent upon where the break occcurred as to what the environmental problem might be and how serious it would be.

Senator DANFORTH. Could you give us a range of possibilities?

Mr. TUEPKER. No, sir, I'm afraid that's out of my area.

Mr. DANFORTH. Do you know what happens to the water once it reaches its destination, say Arkansas or Louisiana? What happens?

Mr. TUEPKER. I have no idea, and that's why I raised the question in my testimony, that certainly this should be a fact that needs to be evaluated and considered.

Senator DANFORTH. OK.

Mr. TUEPKER. I assume it would eventually enter into another watershed.

Senator DANFORTH. What happens, as I understand it, is that, at the point of origin, the coal in powder form is mixed with water, and that water is then pumped through the pipe, and there are various pumping stations along the way. It reaches its destination, and the coal is extracted from the water. Is the water then usable again, do you know, or——

Mr. TUEPKER. Again, I don't know. I raised the question, is there any colloidal suspension left?

Senator DANFORTH. Yes.

Mr. TUEPKER. This, I think, deserves consideration.

Senator DANFORTH. Thank you very much for being with us.

Mr. TUEPKER. Thank you.

Senator DANFORTH. That concludes the hearing.

[Whereupon the hearing was recessed to resume September 16, 1982.]

COAL SLURRY PIPELINES

THURSDAY, SEPTEMBER 16, 1982

U.S. Senate,
Committee on Commerce, Science, and Transportation,
Subcommittee on Surface Transportation,
Washington, D.C.

The subcommittee met, pursuant to notice, at 9:30 a.m. in room 234 of the Russell Senate Office Building, Hon. John C. Danforth (chairman of the subcommittee) presiding.

OPENING STATEMENT BY SENATOR DANFORTH

Senator Danforth. Today the Subcommittee on Surface Transportation concludes 2 days of hearings on the impact of coal slurry pipelines. The committee met on Monday in Kansas City and heard testimony from a number of witnesses about the effect these pipelines could have on railroads, on scarce water supplies in the West, on consumer prices and on agriculture. Today we have a distinguished group of witnesses who are prepared to address those questions further.

To those who were not able to attend the Kansas City hearing, let me reiterate some of my concerns about coal slurry pipelines. I am concerned they will strike a telling blow against the railroad, with the results being higher prices for the railroad's remaining customers. I am concerned they will divert scarce water and possibly cheap energy to the Sunbelt States, with the result being renewed attempts to lure away the business and industry from the Northeast and Midwest.

I am concerned that they will tend to consolidated coal ownership and production into the hands of a few giant firms, with the result being less competition within the industry. I am concerned that utilities may enter into long-term take or pay contracts, with the result being less competition in the transportation of coals and the possibility of huge cost overruns being passed on directly to utility customers.

Finally, I am concerned that legislation before the Senate would confer an unnecessary special privilege on a handful of large and powerful corporations with little or no benefit to society as a whole. These are the concerns I want to address in the subcommittee hearings.

I am pleased to say that the first witness today is Senator Max Baucus from Montana. Senator Baucus.

STATEMENT OF HON. MAX BAUCUS, U.S. SENATOR FROM MONTANA

Senator **Baucus**. Thank you very much, Mr. Chairman. I appreciate the opportunity of appearing before you this morning.

Mr. Chairman, I have a brief statement. I understand perhaps the committee has a question or two. I have another commitment by, at the very latest, 10 this morning, but I will accommodate the committee as best I can.

Senator **Danforth**. Thank you.

Senator **Baucus**. Mr. Chairman, I welcome the chance to explore again some of the complexity surrounding efforts to grant Federal eminent domain power for coal slurry pipelines. I oppose coal slurry pipelines. Although I appreciate the good faith work of slurry advocates such as my colleague from Louisiana, Senator Johnston, I continue to believe that we should leave this important decision to the States.

If pipelines are such a good idea, States will approve them and help build them. There is no need to restate all of the arguments against slurry pipelines and eminent domain authority: their cost, energy consumption, effects on rail employment, potential water quality impacts and so on. Together they are a powerful case against the pipelines.

But there are some additional considerations that will require our attention before we can resolve the coal slurry controversy in the careful, deliberate fashion I think it deserves. We should not and must not rush to enact slurry legislation this session. The stakes are too high.

A matter that has received increased attention in the past few months concerns State water rights. Federal law has spent a considerable amount of time trying to insure that coal slurry legislation will not override State water laws. The Senate Energy Committee accepted some language offered by Senator Wallop on that point. In his minority views on the language, he expresses the view that the amendment would fully protect State water law.

Unfortunately, I must report to you that not everyone is so certain about that point. Recently the U.S. Supreme Court issued its opinion in *Sporhase* v. *Nebraska.* The court indicated that ground water is an article of commerce and is not owned by the States.

The court further held that Congress could authorize States to regulate water in ways that might otherwise violate the commerce clause. However, according to the court, Congress would have to be very specific in expressing such an intention.

Some may argue *Sporhase* creates no problem for the slurry bill because of Senator Wallop's language. However, just yesterday in the Environmental and Public Works Committee, we heard testimony from the administration that raises doubts about that attitude.

Carol Dinkins, Assistant Attorney General for Lands and Natural Resources in the Justice Department, restated the administration's opposition to the bill. She also testified that the Wallop amendment, that is, section 5 of S. 1844, "is not standing alone, free from ambiguity," and that the question, "whether the courts will ultimately determine that this expressed intent is sufficiently clear to immunize those law from commerce clause scrutiny is necessarily a matter of speculation."

That is the opinion of Carol Dinkins, Assistant Attorney General for Lands and Natural Resources.

Dr. Thomas Bahr, Director of Interior's Office of Water Policy, suggested that the Congress asked State officials to express themselves on the question before adopting the coal slurry bill. I agree with his point and I am discussing with Chairman Abdnor the prospect for additional hearings to provide the States an opportunity to study the case and the bill's language, to present testimony and respond to congressional questions on this issue.

I have also contacted a number of legal experts and attorneys general of Western States on this matter, and although we have yet to receive all of the replies, those received to date do not express unrestrained enthusiasm for the Wallop language. In addition, at yesterday's hearing I asked the Justice Department to prepare more detailed legal memoranda on the relationship between the *Sporehase* case and the validity of State water rights under the coal slurry legislation. The Department has agreed to do so.

Mr. Chairman, it may very well be that a more detailed assessment of State water rights may preclude action on a coal slurry bill this session. We cannot control the timing of Supreme Court rulings, nor can we simply overcome legitimate issues by ignoring them or providing incomplete or uncertain answers. Before proceeding, we need to know whether the Wallop language is sufficiently precise, whether it really protects State water export bans, whether it protects further legislative enactments, whether it protects downstream States, an issue I know you are concerned with, and how it affects Federal reserve water rights.

In short, we need to know whether the language as crafted meets the objection and concerns of State governments. Of course, we should also address such matters as the bill's near total preemption of other State laws that may be designed to protect wildlife, land or other aspects of environmental quality.

In addition, we have very little analysis on the question of whether coal slurry pipelines will reduce consumers 'utility bills. We all know that a reduced bill usually means that the utility made a mistake and that they will correct it next month. In fact, the only price effect of slurry pipelines may be to encourage railroads to raise their rates on other commodities in order to recover lost revenues.

Mr. Chairman, I welcome your interest and activity on coal slurry legislation, and I look forward very much to working with you as we try to address this complicated and difficult issue.

Thank you.

Senator DANFORTH. Senator Baucus, thank you very much. I think your last words are particularly appropriate. It is complicated, it is difficult. Legislation such as this and the creation of coal slurry pipelines would clearly have ramifications which should be carefully considered. I am told that the Burlington Northern, which serves Montana, derives 42 percent of its gross revenues from coal traffic. If a coal slurry pipeline were constructed, what would happen, in your view, to Burlington Northern, and what are the risks, if any, for other customers served by the railroad?

Senator **Baucus**. Mr. Chairman, I think the answer to that question is quite obvious. As you point out, in excess of 42 percent of BN's revenue in Montana is derived from coal traffic. Montana grain producers, Montana farmers who ship grain out of State pay the highest freight rates in the country. In fact, Montanans now who ship grain out of Montana pay approximately 30 to 40 percent higher freight rates for the same distance traveled than do other farmers in other parts of the country.

And coincidentally, the example that Montanans not so fondly point to is their freight rates compared to Nebraskan freight rates. Farmers in Nebraska who ship their grain to the west coast are paying about the same rates as Montanans but for 50 percent greater distance. So clearly, if BN suffers a loss in revenue because the coal slurry is diverted, it must make up that difference, and that will result in higher prices for other commodities.

This will be compounded in other commodities and other States because BN is now moving to a holding company. It is isolating its revenues from its coal operations, from its timber operations, from its milling operations, away from its rail operations. In the past, BN Railroad was able to divert some of its coal revenue, some of its timber revenue to help pay for the railroad. BN is moving away from that. It wants to completely isolate its rail revenues from its timber, mineral, and other operations.

In consequence, not only because of lost coal traffic but also because BN is shifting away to other profit centers, it is clear to me that other shippers of other commodities will have to pay much higher freight rates in the future due to the combined effect of the coal slurry legislation and BN's holding company status.

Senator **Danforth**. It is my understanding that Montana State law in effect bars the use of water for pipelines; is that correct?

Senator **Baucus**. That is correct, Mr. Chairman. Montana law provides that water for coal slurry transport is not a beneficial use which is effectively a ban on its use for that purpose.

Senator **Danforth**. And your concern is, despite the attempt in the bill to establish the primacy of State water law, the effect would be to preempt State water law?

Senator **Baucus**. That is the concern. I don't think any of us can categorically state that the bill will certainly preempt State water law. In fact, the Wallop language attempts to prevent Federal preemption of State water law. However, the bill, S. 1844, also says that the construction of slurry pipelines are beneficial uses, so right away there is a conflict under the supremacy clause. There is a very strong argument Federal law will prevail. At the very least, it is a very uncertain question. That is the reason I think we have to nail down some of these problems.

Senator **Danforth**. In any event, there is no protection in the law at all for third party States, as I understand it. That is, if one State decides to sell water or to make water available for a pipeline, that would have an effect on some other State.

Senator **Baucus**. Particularly those downstream States, that is right. And there are many States affected.

Senator **Danforth**. I know of one.

Senator **Baucus**. I know of one, too.

Senator **Danforth**. Senator Pressler.

Senator **Pressler**. I really don't have a line of questions here except I, too, have been concerned about rates for shipping grain, and I wanted to ask, and perhaps you are repeating yourself, but I was very intrigued. I think there are becoming some captive shippers in some of these States, and partly as a result of the inevitable decline of a number of railroads. But what was your line of thinking on the effect on rates for hauling grain as related to the coal slurry pipeline? I thought it was intriguing. Would you repeat it? I think it is very important.

Senator **Baucus**. Yes, I would be very happy to, Senator. It is not irrelevant that the BN is moving to a holding company and so no longer will transfer some of its coal revenues, that is, coal mining or timber production, to the railroad. The railroad will no longer have the benefit of those revenues. That will put increased pressure on higher rates from the railroad.

In addition to that, if the railroad is denied lower revenues for hauling coal—in other words, the railroad itself gets low-revenues because it is hauling less coal there will be additional pressures for the railroad to raise rates on other commodities in order to make up the difference. And certainly for us in the upper Midwest, one of the most important other commodities is grain, and we in our part of the country, as the Senator knows better than I, pay very high freight rate on grains, as we do other commodities; so the effect of losing coal revenue to whatever other use will be to shift to higher rates in other commodities.

Senator **Danforth**. Thank you, Senator Baucus.

Senator **Baucus**. Thank you very much, Mr. Chairman.

Senator **Danforth**. The next witness is Robert Blanchette.

STATEMENT OF ROBERT W. BLANCHETTE, ADMINISTRATOR, FEDERAL RAILROAD ADMINISTRATION

Mr. **Blanchette**. Mr. Chairman, Senator Pressler, it is always a pleasure to be here once again on yet another noncontroversial item affecting the railroads.

I have reduced my statement to writing, which I would, with your leave, ask be submitted into the record of this hearing, and I am prepared to answer questions.

Senator **Danforth**. Is that it?

Mr. **Blanchette**. You know, Mr. Chairman, a good day in the life of a Federal official is one in which he does no positive harm.

I find that the shorter my statements, the better a Federal official I am.

Senator **Danforth**. I neglected at the outset to ask the witnesses to please confine their statements to 5 minutes and I am glad you were able to meet that goal.

Let me ask you some questions, then, Mr. Blanchette. You have heard the testimony of Senator Baucus relating to the likely effects of a coal slurry pipeline on rail transportation. Would you tell us your views of what the effects will be?

Mr. **Blanchette**. I concur in the Senator's analysis. I concur also and call your attention to the analysis prepared by the Department of Agriculture's Mr. Fitzpatrick, who testified before you, I believe, earlier this week. Our estimate is that the coal slurry pipelines will divert existing traffic from the railroads, It is not a question of new traffic. Right now there are idle 42,000 cars that could carry 75 million tons of coal, so we are not talking about a need that is not being. The Interstate Commerce Commission has said the railroads should earn a rate of return of 16.5 percent. Right now they are under 4. In other words, you can make more money in a savings account than you can by investing in the railroads.

The railroads, notwithstanding that, have put in $1.7 billion in coal-related investments. If they lose this traffic, they are condemned to the present rate of return, which is inadequate. With the growth we anticipate by 1990 in traffic, even then the railroads under our estimates may get to an 8.5 or 9 percent return on investment, still woefully inadequate.

The importance of Mr. Fitzpatrick's testimony, coming from Agriculture, is that the impact always hits the bulk commodity. When the railroad loses, the farmer loses because the other commodity, the retail traffic, if you will, is so price-sensitive that the railroads do not have the margins to make up the loss in traffic on automobiles or other traffic that is susceptible of being moved by truck.

They have to take up the slack in the bulk commodities, and that is grain. And we know that when railroads lose, the farmers lose equally. The impact, as we all know, of the bankruptcies and liquidations of the Rock Island and Milwaukee, have been in the South Dakota's and the other granger states.

We have spent in all $13 billion of Federal funds to prop up railroads, and we are now at a point where we see the daylight at the end of the tunnel is no longer an oncoming train. We do see a bit of daylight. We must establish that railroads are now able to join the marketplace as a viable competitor now, on top of that, we are facing a proposal to put them back to where they were when they were having a rate of return less than 3 percent.

Senator DANFORTH. We are going to use coal more and more in this country in the future as a source of energy. Are the railroads capable of meeting the challenge?

Mr. BLANCHETTE. Absolutely.

Senator DANFORTH. No doubt about it?

Mr. BLANCHETTE. No doubt about it.

Senator DANFORTH. Do you know about the relative energy efficiency of rail transportation versus the coal slurry pipeline?

Mr. BLANCHETTE. No. That is beyond the ken of my expertise, Mr. Chairman. All I know is the railroads are there. They have put almost $2 billion recently into building up their capacity. There is no need that is being unfulfilled.

Senator DANFORTH. It is my understanding that the rail transportation is substantially more energy efficient.

Mr. BLANCHETTE. That is correct, but I am not an engineer. If you take certain miles and certain tonnage, railroads are more efficient. I think reasonable engineers can differ on different hypotheticals, and I am really not competent to say, well, if you are talking 40 miles with such a volume, this that or the other thing; but I have seen nothing, nor has the FRA, that demonstrates other than a superiority for rail. But I am not prepared to debate the issue.

Senator DANFORTH. What would be the effect on railroad employment of the coal slurry pipeline?

Mr. **Blanchette**. We are now down to less than 400,000 people in the whole industry. You are talking about a loss, I believe, of $8 billion a year by 1990.

Senator **Danforth**. A loss of what?

Mr. **Blanchette**. $8 billion in revenues to the railroad industry by 1990.

Senator **Danforth**. Caused by?

Mr. **Blanchette**. The diversion of the coal slurry pipeline. They will be competing for the same traffic. It is a straight 100-percent diversion. There just won't be the need for those trains that would have carried $8 billion worth of revenue.

Senator **Danforth**. Would there be an effect on the railroad retirement fund?

Mr. **Blanchette**. I am not prepared to answer that. There obviously would be one. I will document that and furnish it for the record.

Senator **Danforth**. Thank you.

[The material follows:]

Question. What effect would the loss of $8 billion in railroad revenues have on the Railroad Retirement Fund?

Answer. The $8 billion loss in 1990 gross railroad revenues was based on a loss of 227 million tons of coal traffic, the combined annual maximum capacity of all pipelines poposed as Of September 1982. The 1978 OTA study referenced below estimated that the railroads would lose 14,000 jobs in 1990 if five coal slurry pipelines with a total capacity of 119 million tons were built. Over 25,000 railroad jobs would be lost as a result of the higher level of pipeline traffic now projected. It should be pointed out that since it is highly unlikely that all of the proposed pipelines will be constructed, the actual impact on the railroads will undoubtedly be short of this "worst case" situation.

If 25,000 jobs were lost, there would be a decrease of approximately $138 million in annual contributions in 1990 to the Railroad Retirement Fund. In addition to the loss of income, the fund could be depleted by another $121 million in 1990 to cover unemployment insurance benefits to those employees. Those benefits would most likely be paid by borrowing from the Railroad Retirement Fund, since historically, the unemployment fund revenues have been insufficient to cover the required unemployment payments.

Therefore, the 1990 annual loss to the retirement fund (inflated to reflect U.S. wage increases projected by Source 2 below) would be $259 million. Deflating at the same rate, the loss in 1982 dollars would be $133 million.

Note: Dollar amounts are stated in 1990 dollars except where noted.

Sources: 1. Office of Technology Assessment: A Technology Assessment of Coal Slurry Pipelines, March 1978, pages 58, 77–78. 2. Data Resources, Inc., Coal Service, Coal Review, Summer.

Senator **Danforth**. Senator Pressler.

Senator **Pressler**. I am trying to get at this question, and I will be trying to get at it all morning, that you have already asked, Mr. Chairman. What is the national interest here? It is true that we have the railroads in many instances, and they were granted the right of eminent domain, and they were granted land 100 years ago, and as you say, that decision has been made and we have been subsidizing the railroads of late, at least most recently a $30 million grant to my State, which we appreciate very much.

But what, in your opinion, or could you give some view of the national interest in terms of the movement of coal? You said you are not an expert in the cost comparison, but you said the railroads certainly can do it. But if the coal slurry pipelines can do it much cheaper and if the water can be preserved, in essence the administration, in its position of saying that States will grant eminent domain, a lot of States probably won't or will hold out for a very high price. Are we holding up technology here that would allow American consumers to get cheaper energy?

Mr. BLANCHETTE. I think not, Senator Pressler. Going back to the right of eminent domain 100 years ago, it wasn't the case where Wells Fargo was doing the job very adequately.

So to give the railroad the right of eminent domain was not taking something away for which a need was already being adequately met. I think the analogy fails for that reason. There is a technology of slurry pipeline. We are talking about capital formation and we are talking about the balance being tilted by the sovereign. The U.S. Government has an ability to tilt things in such a way as to destroy.

We have seen the impact of Federal tilting on the bankruptcies of the New Haven, the Penn Central, the Milwaukee, and the liquidation of the Rock Island. I think it is prudent government to say let the States, who are always the most severely impacted by the financial distress of railroads, judge these factors; that the Federal Government will stay its hand because the most severe impacts when railroads lose are on local interests. Railroad bankruptcies always affect the branch lines, the grain lines, and the railroad bankruptcy always affects State taxes, local taxes, and local interests. There is not that much else to play with.

I, unfortunately, have lived through more railroad bankruptcies than any other living American. I am tired of the experience, but I know from it that the most severely impacted area of the economy when a railroad goes bankrupt is the State and local interests. The first thing you do is defer State and local taxes. The next thing you do is abandon light density lines, and that is service to the local shipper.

The third thing you do is you raise the rates for bulk commodities which are noncompetitive because you cannot make it up on intermodal competition with the trucks. Therefore, why not then let the State and the local interests be the ones who alter the equilibrium if they see it needs to be altered? Why should the Federal Government alter that delicate balance?

Senator PRESSLER. All right. This is a parochial question here. You have been in South Dakota. You have seen our rail situation. If the coal slurry pipelines are built, will the shipment of grain out of our State by rail be more expensive? Indeed, this question has been asked.

Mr. BLANCHETTE. It has to be.

Senator PRESSLER. How much?

Mr. BLANCHETTE. It has to be.

Senator PRESSLER. Will it be substantial?

Mr. BLANCHETTE. Unless you are going to condemn railroads by eminent domain and nationalize the railroads, if they are going to generate any return on investment through private enterprise, they have to make it up somewhere. If you take the coal traffic away, which is what, 38 percent of their rate base now, you are going to have to find a return on investment someplace. It has to be grain.

Senator PRESSLER. So the State of South Dakota is in a unique position in that we are prepared to go into a coal slurry pipeline which we will get some income from, but you would predict if that goes forward we will lose in the sense that rail rates out of South Dakota will be higher.

Mr. BLANCHETTE. Your State affords an excellent example. On the Miles City Line, which, with your help, we were able to fund and continue in operation, the mainstay was the lignite movement of coal. Without that lignite movement of coal, there would not have been a justification to put Federal money in that line merely for the grain. But for the coal, the grain could not have been shipped economically. We would not have met the statutory criteria. Because you have the coal, we were able with the coal and the grain to find that the railroad could make a payout. It was because of that, working with State interests such as yourself and Governor Janklow, that we were able to put together a viable financial package; but without the lignite, without the coal, that line would be spiked today.

Senator PRESSLER. Let's go down the line a few years and say if we develop the coal slurry pipeline, if we grant eminent domain and all of these things happen, what, in your professional opinion, will be the condition of that line and the rates on it?

Mr. BLANCHETTE. I think the rates will be higher than a cat's back.

Senator PRESSLER. That is a fair assessment.

We are sort of in a dilemma, then, in other words, are we not, in South Dakota?

Mr. BLANCHETTE. Yes, it is a State concern and a dilemma that I don't know Washington can resolve any better than the good people of South Dakota. That, I think, is exactly my point. If it is a South Dakota dilemma, give South Dakota the power to resolve it and not Washington.

Senator PRESSLER. Let me pursue another line of questioning here. I understand the administration believes that the question of eminent domain lies in State jurisdiction. The coal slurries are likely to cut across State lines and are a part of interstate commerce, which is a congressional concern.

Could you please comment on the apparent conflict in jurisdictional authority?

Mr. BLANCHETTE. No; I think the Federal Government, through the Commerce Clause, can exercise the right of eminent domain, as can the States within the States. I think the position of the administration is that it is not wanting in jurisdiction but that it would be poor public policy to exercise that jurisdiction in this case. It is not that the Federal Government does not have the jurisdiction; it is that the President does not recommend that it exercise it because State interests are paramount and therefore the matter ought to be addressed at the State level.

Senator PRESSLER. I guess my final question is just to follow up on the thing about grain rates out of the Midwest. Maybe we have beaten that to death, but it is your strongest feeling that not only in South Dakota but throughout the Midwest, but particularly in South Dakota, if the coal slurry pipeline goes forward, there will be a doubling or tripling of per-bushel cost for hauling grain, especially the traffic that goes out of Montana or Wyoming. That traffic will lose its coal shipments and they will almost entirely be grain shipments, and we are basically a captive shipper now.

Mr. **Blanchette**. That is right.

Senator **Pressler**. And the rates for anyone to run the line will be extremely high. How quickly would you see that developing? Would it be at least 4 or 5 years down the road?

Mr. **Blanchette**. I don't know, Senator. I do remember earlier on the functional bankruptcy of the New Haven Railroad followed by almost exactly a month the completion of the Connecticut Turnpike. I don't see that much of a difference in this case.

Senator **Pressler**. In other words, we must make a very hard choice here is what you are saying.

Mr. **Blanchette**. I don't think the choice is very hard.

Senator **Pressler**. That is all. Thank you.

Senator **Danforth**. Mr. Blanchette, one other question having to do with competition within the coal industry. A coal slurry pipeline will serve some coal producers but not all coal producers. Isn't that a fair statement?

Mr. **Blanchette**. That is correct, yes. It is not a common carrier and it can invest where it chooses.

Senator **Danforth**. Therefore, other coal producers would continue to be dependent on rail transportation; is that correct?

Mr. **Blanchette**. Where there is no pipeline.

Senator **Danforth**. Or where there is a pipeline that will not carry the coal.

Mr. **Blanchette**. That is correct.

Senator **Danforth**. Therefore, if a pipeline is constructed and it serves producer A but does not serve producer B, and producer B is dependent upon rail transportation, is injured or terminated as a result of the pipeline, the effect of that would be anticompetitive in the coal industry, would it not?

Mr. **Blanchette**. Yes; we have seen that example in the Northeast where railroads have come upon hard times, from which we are emerging. We have seen that when railroads are in hard times and must therefore press their advantage to captive shippers, those shippers become less able to compete with shippers in other regions served by healthier lines with good market competition, and we have seen an erosion of industry away from the Northeast.

Senator **Danforth**. Therefore, what is your conclusion?

Mr. **Blanchette**. I do not see the procompetitive effects, where they exist, of coal slurry pipelines to outweigh other considerations of transportation.

Senator **Danforth**. It would seem to me to be anticompetitive.

Mr. **Blanchette**. I think that it is in the situation that you hypothesized, yes. There may be instances where it would be procompetitive, and of course, as we all know, the threat of constructing a coal slurry pipeline can be used as a bludgeon in the bargaining between, for example, a utility and a railroad. Where producer A is not served by a pipeline and he is competitive with producer B, it is obvious it is anticompetitive in terms of producer A.

Senator **Danforth**. The utility would respond by saying that they are now captives of the railroads, they are beholden to them, the effect of the Staggers Act has been a major increase in the cost of transporting coal, that that in turn has been passed on to the consumer, and that they want competition.

Mr. BLANCHETTE. Well, of course. And the argument is not wanting. However, I don't think that one can say that they are bereft of measures at present. All American industry is subject to the antitrust laws. All American industry is subject to not being able to engage in predatory practices or to monopolize. The Interstate Commerce Commission has not been abolished. There are measures available in cases of abuse, so they are not standing there without their own strength.

Senator DANFORTH. It would be my view that if they became locked into a 25- or 30-year take or pay contract with the pipeline, that that would be about as anticompetitive as you can come. You would really be a captive, and you would be a captive for a very long time.

Mr. BLANCHETTE. By hindsight, another valuable argument is I think, had some of the earlier coal slurry pipelines been accepted by the utilities, the utilities would now be in far greater distress on a take or pay contract entered into 20 years ago. They would be in a disaster scenario.

Senator PRESSLER. Could you have your staff—I am sure you couldn't do it off the top of your head, but if you can, fine. Let's say that the coal slurry pipelines proposed were operating tomorrow under present economic conditions. What would it cost per bushel to ship grain out of South Dakota? I would like your best estimate on that. If you cannot do it now, would you like to send it over?

Mr. BLANCHETTE. I shall.

[The following information was subsequently received for the record:]

Question. If coal slurry pipelines were operating tomorrow under present economic conditions, what would it cost per bushel to ship grain out of South Dakota?

Answer. The question is certainly hypothetical, since no coal slurry pipeline could become operational for several years, and economic conditions are likely to change. However, if it were possible to do so, a portion of Powder River Basin coal now carried on western railroads would be diverted to proposed slurry pipelines. The Burlington Northern originated 112 million tons of coal in 1981, of which 70 million tons are moved parallel to proposed pipelines. The affected coal traffic represented 25 percent of BN's revenue in 1981. The Chicago and North Western also participates in some of those movements, as well as terminating 15-20 million tons of coal originated on other lines, which might be diverted. These two railroads carry most of the 30 percent of South Dakota grain which moves by rail.

Assuming a maximum loss of coal tonnage equal to the total capacity of the pipelines, there would undoubtedly be a negative impact on the Burlington Northern's revenue base, the extent of which would depend on future levels of coal production. Because grain rates are sensitive to many factors, is impossible to project how this revenue loss would be reflected in South Dakota grain rates.

Senator PRESSLER. If you want to do it off the top of your head, I would appreciate it.

Mr. BLANCHETTE. It would not be very reliable off the top of my head.

Senator PRESSLER. But I would appreciate that information. What is your best estimate, if they were operating, how much it would cost me to ship my grain out, or how much would it cost South Dakota farmers?

Mr. BLANCHETTE. We will give you our best estimate as soon as we can, sir.

Senator **Pressler**. All right. Thank you.

[The statement and information requested follows:]

Statement of Robert W. Blanchette, Federal Railroad Administrator

Mr. Chairman and members of the subcommittee, thank you for the invitation to testify on legislation that would extend Federal eminent domain to interstate coal slurry pipelines.

The Administration's position opposing any such legislation is set forth in the attached memorandum on the subject signed by the President on November 16, 1981. That position has been amplified in testimony by representatives of the Departments of the Interior and Transportation, including the Secretary of the Interior, at hearings held last November and December by the House committees considering such legislation. While the Administration supports competition among transportation alternatives, it also believes that the acquisition of rights of way should remain within the jurisdiction of the affected States. The position of the Administration has not changed, and from the prespective of Administration has not changed, and from the perspective of transportation policy, no existing national interest not previously addressed alters that position. Martin F. Fitzpatrick, Jr., Director of the Department of Agriculture's Office of Transportation, testified before you in Kansas City on Monday on this subject, and I concur fully in his statement on the Administration's position.

This completes my prepared statement. I would be happy to answer any questions from you or other members of the Subcommittee.

Enclosure.

The White House,
Washington, November 16, 1981.

MEMORANDUM FOR THE SECRETARY OF THE INTERIOR

Subject: Administration position on legislation on coal slurry pipelines

After considering the information presented during the Cabinet Council on Natural Resources and Environment, it is my view that this Administration should support competition in the fields of energy development and transportation. Coal slurry pipelines may be an efficient and cost-justified way to move coal and they should be allowed to compete on their own merits as contributors to improving America's energy situation.

I recognize that there may be significant problems in right-of-way acquisition. However, this Administration will not support legislation which has been introduced in Congress to provide a federal right of eminent domain to override these difficulties. Our commitment to the vitality of state governments should not be abandoned simply because it may at times be inconvenient. The extension of federal powers of eminent domain should not be undertaken lightly.

At the same time, it is clearly contrary to the national interest for private parties such as railroads, or for individual states, to thwart projects beneficial to the nation simply for their own parochial purposes. I am therefore directing the Secretary of the Interior, the Secretary of Energy and the Director of the Office of Intergovernmental Affairs to work with states and private parties to ensure that coal slurry pipelines are not prevented from competing by unjustified impediments to their ability to negotiate for rights-of-way.

I believe this is the best resolution of a difficult question involving a conflict of the principles of federalism with the nation's need for competition in transportation.

Ronald Reagan.

Senator **Danforth**. Thank you, sir.

Next we have Ross Workman, senior vice president of Continental Resources Co., and chairman of the board of Slurry Transport Association

STATEMENT OF ROSS WORKMAN, CHAIRMAN, SLURRY TRANSPORT ASSOCIATION, SENIOR VICE PRESIDENT, CONTINENTAL RESOURCES CO.

Mr. **Workman**. Thank you, Mr. Chairman.

My prepared testimony has been distributed, and I am cognizant of the admonition to summarize it within 5 minutes, and I will certainly attempt to do so. Also within that time I will try to address some of the points which you raised at the outset as concerns that you have, and those that Senator Pressler has raised.

Fundamentally, the Slurry Transport Association appears in support of S.1844, and we believe that the most fundmental reason, public policy reason, for this enactment is that it would create the opportunity for competition, not necessarily create competition, for coal transportation.

All that the slurry pipeline industry seeks is the creation of a set of conditions which would enable it to try to compete for some of the business, a small part of the business of transporting coal. And to put the volumes into perspective, I think it is useful to point out that the National Energy Transportation Study has estimated that if all of the coal pipelines now proposed were built, they would carry 19 percent of the increase in coal traffic in the next 10 years, and in 1990 they would be carrying 5 to 9 percent of the total amount of coal traffic in the United States. That, I think, indicates that what coal pipelines seek to do is share a part of the growth of the market, not take away some of the business from the railroads.

I think that also indicates that the specter of lost jobs is a false one. The railroads will have to increase dramatically in their ability to transport coal, and they will have to have more employees to do that. In the case of my own particular company, Coalstream Pipeline, it proposes to carry 54 million tons of coal per year to Georgia and Florida if built. In 1990 it would carry about half of the coal used in those States, and the railroads would have to increase their transportation to Georgia and Florida in 1990 over their 1980 levels by 81 percent, a substantial increase in the coal business for the railroads and no loss of jobs resulting from the construction of this very major pipeline.

Similarly, because of this growth in the coal business and the small amount that would be diverted to pipelines if they were able to be built and were successful in their competition, the impact on grain hauling and other commodities has been grossly overestimated, in my opinion.

Another question you raised at the outset was the possible diversion of jobs to the Sun Belt. We believe that the growth in the use of coal will happen because of market forces that make coal a beneficial fuel for America and that coal will go where the growth is but will not create the growth; that whether pipelines are built or not, the Sun Belt will grow as it is going to.

As far as the opportunity for small producers to transport their coal by pipeline, they would be, we believe, enhanced in their ability to obtain low cost transportation. Presently, small producers very infrequently are able to get their coal into a unit train. A small mine is not large enough to support a unit train facility. In order to get their coal into a unit train, they must truck it over to a larger mine and use that unit train facility.

On the other hand, the coal pipeline will at least provide the same opportunity, and because it will gather coal in a different way, in small amounts from individual mines, it provides a significant opportunity for small producers to get their coal into the pipeline.

Long-term contracts is a subject just discussed with the last witness. We believe this is an aspect of the opportunity for competition which we see. We will have no way of forcing utility companies or the public service commissions which regulate them to enter into or approve of long-term contracts, except to entice them by economic benefits.

We do not have the advantage that a railroad does with a captive shipper, a railroad which has the only means of transporting coal in a specific mine. We must go and offer something that will induce the utility to enter into that long-term contract.

This is not uncommon in the utility business. They purchase their coal on a long-term contract, sometimes for the life of the coal mine. They have purchased natural gas from pipeline companies on long-term contracts and have been very satisfied. These contracts are risky for both sides.

We must make our best estimate of what will provide a reasonable return for the pipeline, and they will have to make their best estimate of whether it is a good deal for the utility companies and the consumers. The public service commissions in each State will have an opportunity to review them in determining whether or not to allow those charges in the electric rates. Everyone makes their bet and the competition will determine the outcome, if competition can be created.

But there will be no competition for coal pipelines unless there is a Federal eminent domain statute. It cannot be done on a State-by-State basis. The reason for that is fairly simple. It is a manifestly interstate operation. My own company tried to do it on a State-by-State basis. We started in Florida, where we were a good corporate citizen and the principal transporter of natural gas to the State where we were headquartered.

After two sessions of the Florida Legislature, we finally succeeded in getting a bill passed which has so many railroad-inspired amendments that it is absolutely unworkable. The prospect of going to 9 or 10 other States to get something that would fit so you could do the whole pipeline is impossible. Railroads will prevent us from doing it that way. It is interstate and that is why Congress should do it.

The rush to enactment was mentioned. That should be viewed as this being the 20th year Congress has been considering this. This is not a precipitous rush. State water rights have been discussed a lot in those 20 years and a formulation has been worked out, which I believe a majority of the Senate would vote for, that satisfies State water rights questions. It is a balanced approach.

Relative efficiency of transportation. I am sure you will hear something about that from my friends in the rail business. There are studies that indicate that transporting coal by rail is inherently more efficient than transporting it by pipeline. That study was done by the Congressional Budget Office. It considered a certain number of circumstances and assumptions. It has itself been analyzed and expanded upon by the Virginia Polytechnic Institute in Blacksburg, Va., which prepared a further analysis comparing the cost, pipeline versus rail, and the Virginia study finds them to be roughly comparable when all of the appropriate conditions are being considered.

I will offer that for the record to supplement this testimony, and I will not go into the details.

With that, I am prepared to take any questions.

Senator **Danforth**. Thank you very much.

What is a take or pay contract? What does that mean?

Mr. **Workman**. A take or pay contract is terminology which I think comes from the natural gas industry. Under the contract, the purchaser agrees to buy the commodity or pay for it if he does not actually take delivery.

Senator **Danforth**. It is said that for a pipeline to be constructed, in order to get the financing for the construction of a pipeline, a long-term, 25- or 30-year-take-or-pay contract would have to be in hand. Is that correct?

Mr. **Workman**. Almost. I have a couple of modifications. First of all, I think it will be a ship or pay contract because the pipeline will offer transportation service just like its competitor, the railroad, does. It will seek to sign a contract with the shipper of the coal for transportation services.

Second, the duration may well be less than 20 years. That remains to be a subject of negotiation as the pipelines and the utilities try to work out those contracts. I think pipelines could probably be financed with 10-year contracts.

Senator **Danforth**. Would you say 10 would be the likely number of years? What would you guess would be the average?

Mr. **Workman**. As I said earlier, it is forecasting on a long-term bet. The utility might decide its leverage at the time of the negotiations was very strong, and it could lock in low cost compared to prospective rail costs, and it might want to do it for a 30-year period. The pipeline, on the other hand, might want to do it for a short period, 10 years or whatever it takes to finance, and the numbers that would come out, I would expect, would be different in each set of negotiations. But I think they will probably be more than 8 years and less than 20, in most cases.

Senator **Danforth**. You said ship or pay, and you said the negotiations would be between the pipeline company and the utility.

Mr. **Workman**. I think that is the most likely scenario.

Senator **Danforth**. That would mean the utility would be shipping the coal to itself.

Mr. **Workman**. Yes; as they do now in most cases. They purchase coal and arrange for transportation.

Senator **Danforth**. At what level do they own the coal? Do they own the mine?

Mr. **Workman**. In some cases they own their own mines. More commonly, they do not own the mine and they take delivery of it at the mine, at the point it is loaded in the train.

Senator **Danforth**. Is it a growing phenomena that utilities own the coal and the mine itself?

Mr. **Workman**. I don't think that it is a growing phenomena, but I am not certain of that.

Senator **Danforth**. What would be their interest in the pipeline, if any? Would they have any economic interest in the pipeline?

Mr. **Workman**. They would have no ownership interest in the pipeline, probably. I don't think they are logical participants in the construction of the pipeline. They have other demands on their capital, and it would confuse the ratemaking situation for them. They are just not the kind of people I expect to be owning pipelines.

Senator **Danforth**. Should they be prohibited from owning pipelines, in your view?

Mr. **Workman**. I don't see any particular reason to.

Senator **Danforth**. Let's suppose they own the coal, they own the pipeline. They are a regulated industry as far as selling energy is concerned. It would be a totally noncompetitive, vertically integrated operation; wouldn't it?

Mr. **Workman**. Yes; but I don't see anything wrong with vertical integration in that regard. They sometimes own the coal and put a powerplant right at the edge of it, and they are vertically integrated there.

Senator **Danforth**. I mean there would be absolutely no marketplace operation whatever; would there? They would own the coal, the pipeline and the utility, and they would be regulated and just pass it on to the ratepayer.

Mr. **Workman**. And regulation is the vehicle we have used to protect the public interest in that case, and electric utilities are extremely well regulated.

Senator **Danforth**. Yes; but I mean this would be in an age when we are attempting to deregulate various portions of the economy. This would be a major move to create a totally regulated, integrated industry, wouldn't it?

Mr. **Workman**. It would. I think, first of all, this is a very unlikely scenario you are talking about. Second, it would be squarely analogous to a mine mouth powerplant where the utility owned the coal in the ground and moved it to the powerplant by a conveyor belt. It would be just a longer conveyor belt.

Senator **Danforth**. At what point in time would the take or pay or ship or pay, however you want to characterize it, contract be signed?

Mr. **Workman**. As soon as the Congress passes and the President signs S. 1844.

Senator **Danforth**. Prior to construction?

Mr. **Workman**. We will start to negotiate those contracts immediately.

Senator **Danforth**. And subsequent to the entering into the contract, the pipeline would actually be constructed?

Mr. **Workman**. Yes; and there would be other steps going on in between, engineering and obtaining certificates of convenience and necessity.

Senator **Danforth**. Let's suppose that a pipeline were constructed, that the contract was entered into and the pipeline was constructed, and it turned out the cost of the pipeline was going to be substantially more than was believed at the time the contract was entered into. Then what would happen?

Mr. **Workman**. We believe that the completion risk and the risk of the cost overrun would be borne by the equity owners of the pipeline.

Senator Danforth. It would have no effect on the utility?

Mr. Workman. The utility, if I understand your hypothesis, would have signed a contract for rates which turned out to be insufficient to support the cost of the pipeline, and the utility, I believe, would have an enforceable contract at those rates. It might bankrupt the owners of the pipeline if it were bad enough, but that is the risk of competition.

Senator Danforth. Senator Pressler.

Senator Pressler. As I understand it, for the first major coal slurry pipeline the right of eminent domain has already been obtained. It has been negotiated. There is no right of eminent domain, but the one the South Dakota line will feed into will be constructed whether Congress acts on eminent domain or not. Is that right?

Mr. Workman. I believe that is probably right. The right-of-way has largely been acquired through various means. State eminent domain rights are available in many places. I do not believe they have been used. The right-of-ways have been acquired from most landowners by negotiation, and crossings under the railroad track have been acquired and proven through $20 million worth of litigation with the railroads.

Senator Pressler. So in other words, if Congress did not pass this eminent domain legislation, why could not the other pipelines be built in the same way? Why could you not acquire things the same way you did for this first one? Is it just too expensive? What would happen?

Mr. Workman. It was possible with the ETSI line, and it is conceivably possible for some other western lines because of the peculiar land title situation which exists in the West. In many places there, the railroads own only the surface rights for their track; someone else owns the underlying fee interest. The pipeline in ETSI's case was able to purchase a right-of-way underneath the railroad from the underlying owner. The railroads contested that in a great number of cases—60, I think—and after $20 million of litigation, the pipeline proved it had a good right-of-way.

That situation of surface ownership only does not exist throughout the country. It does not exist at all in the East, where my company proposes to build a coal slurry pipeline. The railroads typically own the right-of-way in fee, and there is no one with whom you can negotiate. We have to cross railroad tracks about 170 times.

Senator Pressler. In terms of the public interest, it is your contention that the consumer would have much cheaper energy if coal slurry pipelines are built. I have seen some of your numbers, and I do not know whose numbers to believe. But briefly, how much cheaper can you move coal than the railroads can?

Mr. Workman. A study done for us by National Economic Research Associates, a firm of consulting economists, estimated that in the first 20 years of operation of the coalstream system, and if it was hauling 54 million tons of coal per year, the savings in transportation costs would be $54 billion in nominal dollars through that time, or $16 billion in 1980 real dollars. That is the order of magnitude of the savings: billions of dollars cheaper.

Senator Pressler. What about the effect on the movement of the water? Of course, I guess in the case of the ETSI pipeline you have the Missouri River as the source potentially. But what about if we have these coal slurry pipelines all over the country, what impact will that have on water supply?

Mr. WORKMAN. It will vary from State to State. In some cases where water is relatively plentiful, it will have no impact at all. Take the coalstream project for prospective; it is an eastern line; it will use 40 cubic feet of water per second. The average stream flow in the Ohio River is 77,000 cubic feet per second. So the amount of water used is miniscule in relation to what is there.

In other areas where the water is less plentiful, the impact would obviously be relatively larger. Whether it would be as socially acceptable in size or not is to be determined by the States as they regulate the allocation of water. And that is what the legislation provides for.

Senator PRESSLER. Do you have any prediction on the coal slurry pipeline that has been approved or that you have eminent domain for? If ETSI hauls coal out of Wyoming by pipeline, will hauling grain out of South Dakota by railroad become more expensive?

If so we may be a State caught right in the middle: on the one hand, we get so many million dollars a year payment for water from the Missouri River if the sale holds up; but on the other hand we will lose so many million per year in terms of higher grain shipment prices in terms of revenue to the State. Would you agree that that is a fair analysis?

Mr. WORKMAN. I am not certain that it is at all. I do not know the railroad business, I hasten to add. But I understand the Burlington Northern has said that it would not cross-subsidize, and if it had a spur that was carrying grain and it was not economic to keep it in business because it was not making money, they would shut it down, and they would not subsidize it with the revenues of their coal transportation.

That they are turning to a holding company scheme, as the first witness described, indicates that kind of cross-subsidization is not likely at least in some cases. I think the railroad witnesses are much better able to tell you what they would do than I.

What I think I can tell you is that the amount of coal transported by pipeline will be a relatively small amount of the total and it will be a relatively small amount of the growth in coal traffic.

Senator PRESSLER. On that particular line, if you have coal and grain moving on the same line, you would not have a cross-subsidization process, you would have a situation where the grain and the coal presumably would be on some of the same trains or the same track.

It is a unique situation, maybe, and I hate to talk about my own State all of the time this morning. But it is right in the middle of this. So I will keep on.

In any event, on that particular track, you would not be talking about a cross-subsidization, would you? You would lose the shipment of the coal, which would make in terms of that track's total revenue, much smaller if the pipeline is built. Would that not be true?

Mr. WORKMAN. I think what the railroad would lose is some of the increase in shipment of coal. The revenue, after construction of the pipeline in say 5 years, from coal transportation, would be higher than it was before, in real terms. The volume of coal shipped by that rail would be higher after the pipeline was built than it was before because the pipeline is not going to take just existing business, it will take some of the growth and the growth will more than make up for what the pipeline takes.

Senator PRESSLER. So, in other words, you contend there is enough business there for both of them, and the building of the pipeline will not, as was predicted by two previous witnesses, take so much business away that the grain costs will be much higher?

Could you have one of your staff people or yourself later submit to this committee your estimation of what would happen to the cost of shipping grain by rail out of South Dakota if the coal slurry pipeline were in full operation, the one that is contemplated, what effect that would have, from your point of view, or what your best estimation would be?

Mr. WORKMAN. We will try to make that estimate. I believe you will have a witness today from the Burlington Northern who can probably give you an estimate of how much coal his company expects to haul in 1990 versus 1980, and there I think you will see the growth.

But we will try to make that estimate.

[The information follows:]

SLURRY TRANSPORT ASSOCIATION,
Washington, D.C., September 27, 1982.

Hon. LARRY PRESSLER,
U.S. Senate,
Washington, D.C.

DEAR SENATOR PRESSLER: This letter responds to your question regarding the effect coal pipeline development could have on railroad transportation charges for South Dakota wheat (Senate Commerce Surface Transportation Subcommittee, September 16 hearing). The short answer is "none."

To expand on that conclusion, I believe it is necessary to address directly the less than subtle threat presented by the railroads—that if they lose revenues to coal pipelines, wheat and other non-coal freight will have to make up for the financial loss caused by new competition.

The answer to your question really comes down to estimating whether the railroads will in fact lose substantial coal traffic to the pipelines. The answer again is "no."

A most concise analysis of this issue was presented in the House Interior and Insular Affairs Report dated January 29, 1982 (Rept. 97-423 Part I, p. 6):

"The record should indicate that projected estimates of the coal shipping capacity of the coal slurry pipelines at their peak performance contradicts the railroad industry's prophecy that it will be squeezed out of the coal shipping market. Using the NETS reporting demand figure for 1990 of 1.515 billion tons, and assuming that all existing and presently proposed coal slurry pipelines were operating at full projected capacities in that year, pipelines would handle 170 million tons—slightly more than 11 percent of total coal shipped. Barges and trucks could reasonably be expected to handle no more than 390 million tons—about 26 percent. Railroads would have to handle at least 955 million tons of coal in 1990—63 percent. In 1980, railroads accounted for approximately 65 percent of the coal shipped. While the railroads' percentage or "share" of the overall market would decline slightly, the actual gross tonnage would grow tremenously because of the total market expansion in the future. Tonnage handled by the railroads would rise from 520 million tons in the 1980's to 955 million tons in 1990—an increase of almost 84 percent . . . ."

Clearly, Senator Pressler, this slight decline in the railroads' share of the anticipated growth in coal traffic does not warrant the threatened rate increases in wheat or any other freight charges. If they decide to raise wheat rates, it will be done to increase profits and because they believe competitive forces will permit the rate increases to stick. Railroads will do that with or without coal pipeline competition.

Finally, I would like to quote from a recent interview with CSX's Chairman, Mr. Hays T. Watkins, appearing in U.S. News and World Report. When asked if the railroads' present prosperity was likely to continue, Mr. Watkins replied:

". . . The fact that this industry has done so well in the past year under very poor economic conditions is a great harbinger of things to come. Railroads are probably one of the better growth industries for the next decade. Thanks to deregulation, railroads are now able really to compete with trucks and barges for traffic . . . ."

We would simply like to add coal pipelines to his list of competitors.

Sincerely,

Ross WORKMAN, *Chairman.*

Senator PRESSLER. Your testimony indicates the increased demand for coal will put a great strain on current transportation systems, yet the railroads maintain they have excess capacity waiting to be utilized. After looking at all the statistics quoted before this subcommittee, do you really believe there will be enough coal traffic to sustain competitive transportation modes?

Mr. WORKMAN. There will be enough coal traffic, or the pipelines will not be built. The pipelines will only be built if they can successfully compete to obtain a portion of that business. The witness this morning testified about the amount of money that the railroad industry has spent in recent years on increasing its coal handling capacity, and it expects to increase that again further.

In the case of the Coalstream pipeline, the railroad facilities hauling coal to Florida presently handle 8 or 9 million tons of coal. I think it is about 8 million tons. We have a million tons imported from South Africa and Poland. The forecast for coal traffic through Florida go in the order of 25 to 35 million tons. In my opinion, the existing rail transportation systems to Florida and within the State of Florida are not sufficient to carry that increased amount of traffic. There may be cases in some areas where the existing facilities are sufficient for the growth of coal traffic, but they are not uniformly sufficient throughout the country.

Senator PRESSLER. Thank you, Mr. Chairman.

Senator DANFORTH. Senator Gorton.

Senator GORTON. No questions.

Senator DANFORTH. Thank you very much, Mr. Workman.

Mr. WORKMAN. Thank you, Mr. Chairman.

[The statement follows:]

STATEMENT OF ROSS WORKMAN, CHAIRMAN, SLURRY TRANSPORT ASSOCIATION

Mr. Chairman and members of the subcommittee, I am Ross Workman, Chairman of the Board of Directors of the Slurry Transport Association and Senior Vice President, Continential Resources Company. The Slurry Transport Assoication, Headquartered in Washington, D.C., is an organization of eight domestic and foreign companies and individuals that are interested in the construction and operation of slurry pipelines, particularly coal slurry pipelines.

Coal pipelines can provide substantial economic and energy benefits to our nation as a supplemental and alternative method of transporting coal. The benefits of coal pipelines are most pronounced in interstate systems that transport large quantities of coal over long distances. In most cases, however, interstate coal pipelines can only be developed if legislation such as S. 1844 and H.R. 4230 is enacted to grant such systems the Federal power of eminent domain.

The purpose of my testimony will be to discuss the benefits of coal pipelines and the reasons that legislation granting the Federal power of eminent domain to interstate coal pipelines is both necessary and in the national interest. I appreciate the opportunity to appear before you today.

INTERSTATE COAL PIPELINE: A DESCRIPTION

The term "interstate coal pipelines" covers a number of methods for transporting coal. The coal pipelines that have been developed in the United States mix coal and water in a "slurry" for transportation. However, various companies and researchers have considered using methanol, liquefied carbon dioxide or petroleum as the medium for the pipeline transportation of coal. At least one company is considering the development of a pipeline that would use a medium of brine to transport coal in some form of container. The definition of "coal pipeline" that is contained in S. 1844 is sufficiently broad to cover all of these coal pipeline systems.

Because the coal pipelines that are in existence today and that are most likely to be developed use water as the medium of transportation, I will briefly describe a typical interstate coal slurry pipeline system.

In such a system, coal is gathered from mines by pipeline, rail, truck or conveyor belts and delivered to one or more preparation facilities. At the preparation facility, the coal is mixed, cleaned and treated, if necessary, then crushed to the particle size of sugar and mixed with water at the rate of one ton of coal to one ton of water. The resulting slurry of coal and water is stored in tanks with mechanical agitators to prevent settling. From the storage tanks, the slurry in introduced into a buried steel pipe and is propelled through the pipe at a velocity of approximately 6 feet per second by a series of pump stations that are located at intervals of 50 to 150 miles, depending on the terrain, pipe size and other such design considerations. No water is added to the slurry after the slurry is introduced into the buried steel pipe for transportation.

At the delivery end of the pipeline, the slurry is introduced first into agitated tank storage, from which it is fed into a dewatering facility. Dewatering is accomplished by natural settling, vacuum filtration or by centrifuge. Any finely ground coal still suspended in the water can be separated by chemical flocculation. After additional drying by the application of heat, the coal is then stored, transported further by other modes, or introducted directly into grinding equipment at a power plant and injected into the boilers. The water reclaimed from the slurry normally will be used in an electric generating station's cooling system to condense steam or will be cleaned for discharge. Attachment 1 [1] provides a schematic of the various operations that are included in a coal pipeline system.

Discharge of water used in the coal slurry mixture is subject to state and federal water pollution laws. The Clean Water Act, formally called the Federal Water Pollution Control Act, establishes minimum quality standards and prohibits the discharge of any water which does not meet these standards. Before water can be discharged permits must be obtained and permit holders must prove that all applicable standards will be met. The Act also authorizes the Administrator of the Environmental Protection Agency to delegate to states certain aspects of water pollution control. Consequently, states have enacted water pollution laws and established agencies to administer them.

An example of the application of state and federal water pollution control law to the water used in coal slurry pipelines is the ETSI Pipeline Project, a proposed coal slurry pipeline running from Wyoming to Arkansas and other southern states. A final Environmental Impact Statement was issued for the proposed pipeline, as required by the National Environmental Policy Act. It examined the environmental effects of discharging the water used in the slurry pipeline and concluded:

> Water discharged into freshwater streams or rivers will have no impacts on the beneficial uses of the streams or rivers;
>
> Water discharge will not affect the aquatic biology because the discharge must meet applicable state water quality standards and National Pollutant Discharge Elimination System permit standards set by EPA;
>
> Projected levels of metals after treatment of the water would be less than all EPA Primary Drinking Water Standards; and
>
> Water treatment facilities will reduce the levels of total dissolved solids and sulfate to state standards.

The costs of treating water used in a coal slurry pipeline in order to comply with state and federal water pollution control laws will be borne by the pipeline company, and have been included in the construction costs. For example, the Coalstream Pipeline Company estimates that it will cost a few cents per ton of coal to treat the water.

The Seventh International Technical Conference on Slurry Transportation held this March in Lake Tahoe, Nevada, devoted an entire session to wastewater disposal. Additionally, the ETSI Pipeline Project has completed operation of six months of testing in a coal evaluation plant in White Bluff, Arkansas in which ETSI developed a method of forecasting wastewater quality using specific water and coal. It is the conclusion of those experts who have reviewed water disposal that while chemical interactions do occur between water and coal under simulated conditions of coal slurry pipelines clean up can be achieved.

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[1] The attachments referred to in this statement have been retained in the committee files.

In his statement at the Technical Conference, Dr. James W. Moore, Department of Civil Engineering, Unversity of Arkansas, stated:

"Recognition that treatment requirements, and appropriate treatment processes, are very much dependent on site specific considerations is difficult to over-emphasize, because of the variation in slurry wastewater charactertistics which occurs as a result of the coal and water sources used and because of the variation in surface water standards among streams. However, this is consistent with variations in other industrial wastewaters and with municipal wastewaters and is recognized by personnel in the pollution control profession."

To date, companies have announced plans for the construction of nine interstate coal pipeline systems that are in various stages of development. Seven of the projects would originate in the West. One project, which is being developed by my company, originates in the East. In the 1960's, another coal pipeline was proposed to move coal from West Viriginia to New Jersey. While that project was shelved when eminent domain legislation failed, the project conceivably could be revived. A brief description of each of the current proposed coal pipeline systems is included in my testimony as Attachment 2.

My company proposes to build an interstate coal pipeline that will be operated by our subsidiary, the Coalstream Pipeline Company. (See Attachment 3). Our pipeline will deliver up to 54 million tons of coal annually 1500 miles from the Illinois Basin and Appalachian coal fields to Florida and Georgia. In 1982 dollars, our interstate coal pipeline system will cost $3.5 billion to construct and will require 2½ to 3 years of actual construction time. We are also considering the development of a 10 million tons per year slurry export facility to be located at an Atlantic port in Florida, Georgia or the Carolinas.

II. NATIONAL BENEFITS FO INTERSTATE COAL PIPELINES

A. Will Provide Competition in Coal Haulage Rates

For the foreseeable future, the vast majority of domestic coal shipments will be make by rail. The National Energy Transportation Study (NETS), that was published in July, 1980, states that in 1976, 73 percent of all coal was originated by railroads, 12 percent by water and 15 percent by truck. (NETS, p. 61). The Study projects that the rail share of coal haulage could reach 87% to 90% in 1990. (See NETS, Figure 3-1 p. 33). A recent study by Data Resources, Inc. states that 468 million tons of coal were moved by rail in the U.S. in 1980 and, assuming that no interstate coal pipelines are built, rail haulage of coal will increase to 746 million tons in 1990 and 1, 156 million tons in 2003. (Attachment 4, Table 4).

The Staggers Rail Act of 1980 began to return market regulation to the railroads by deregulating many railroad activities, including, with some limitations, the haulage of coal. In addition, the Staggers Rail Act assured that railroads have the authority to enter into long-term coal haulage contracts. The full benefits of market regulation of railroad operations and long-term contracts for rail coal haulage will not be realized, however, unless the railroads are faced with viable competition from other modes of transportation. Coal pipelines can provide that competition.

To date, coal pipelines have proven to be cost effective are reliable modes of transporting domestic coal in two basically intrastate systems in Ohio and Arizona. An intrastate coal pipeline that was operated for several years in Ohio by Consolidation Coal Company was mothballed in 1963 after six years of operation when the competing railroad dropped its coal haulage rate from $3.47/ton to $1.88/ton. Latest figures indicate that the Black Mesa Pipeline in Arizona, which is operated by an affiliate of the Southern Pacific Railroad, is delivering coal efficiently and reliably at an extremely competitive rate. I am told that the Black Mesa Pipeline was built because the cost of building a railroad line across the rugged terrain in that part of Arizona was prohibitive.

The economics of the proposed pipelines appear to be equally attractive. A study of our Coalstream project by A. T. Kearney, Inc. (May, 1981) concluded that transporting 54 million tons per year of coal by pipeline rather than rail would result in an aggregate tansportation savings of $12 billion in 1980 dollars for the twenty-year period beginning in 1988 dollars for the twenty-year period beginning in 1988. (See Attachment 5). Such dramatic results are achieved by coal pipelines because most of the costs of a coal pipeline system are capital costs, which are insulated from the effects of inflation after construction is completed.

The Preliminary Report of the National Energy Transportation Study has reached a conclusion that is consistent with our nation's experiences with both the Ohio pipeline and the Black Mesa line and with the results of the Kearney study.

"Under appropriate conditions, coal slurry pipelines can be the economical and environmentally preferable means of transporting coal.

"Also, in light of pending deregulation of the railroad industry, coal slurry pipelines would tend to keep rail rates at a more competitive level".

(NETS, p. 76)

B. Will Provide Additional Capacity for Coal Haulage

The National Energy Transportation Study (July, 1980) projects that total coal haulage by all modes of transportation will triple between 1985 and 1990, reaching a total of 1,184 to 1,345 million tons (p. 33). Increases of this magnitude will create a substantial strain on our railroads, waterways, and highways that coal pipelines can help to alleviate. According to the NETS Study.

"Coal slurry pipelines have been resisted by the railroads because of fears that pipelines would reduce rail coal shipments and profits. However, the future demand for coal in areas currently being served by railroads is expected to be sufficiently large to require additional coal distribution capacity. Coal slurry is an efficient way of providing some of this additional capacity. Recent analyses conducted for DOE indicate that with or without coal slurry pipelines, railroad transport of coal will increase dramatically. The addition of coal slurry pipelines provides another option to insure that the overall distribution system expands efficiently to meet national coal production goals.

If all the slurry pipelines currently under consideration are built and operated at full capacity, they will be able to carry 176 million tons by 1990. This amounts to 19 percent of the increase in inter-BEA coal traffic. However, a recent study conducted for the Department of Energy concluded that slurry pipelines are most likely to be carrying between 70 and 126 million tons of coal in 1990. This amounts to between 5 and 9 percent of the total coal to be transported in 1990.

(NETS, p. 776, et seq.)

C. Will Assist U.S. Steam Coal To Compete In The World Coal Market

1. The European and Pacific Rim Markets

U.S. steam coal must compete against foreign coal in at least three distinct markets: the European market, the Pacific Rim Market and the U.S. market. The projected foreign market for U.S. steam coal is huge. (See Attachment 6). For example:

> Belgium, Luxembourg, Denmark, France, Italy, The Netherlands and West Germany used 46.1 million tons of steam coal in 1979, but are projected to use 124.2 million tons in the year 1990—an increase of almost 300% in 10 years.
>
> Japan, Korea and Taiwan used 13.9 million tons of steam coal in 1979, but are projected to use 67.8 million tons of coal in 1990—an increase of almost 55% in the same 10-year period.

During visits I made to West Germany, the Netherlands and France in the past year, I learned that Europeans are interested in purchasing our steam coal due to the general stability of the United States, but that our coal must also be competitive in price. The testimony by coal importers from Europe and the Pacific Rim nations at Senator Warner's excellent hearins in December, 1981, was to the same effect. The Europeans with whom I visited expressed concerns about railroad dominance in the U.S. and the impact of the Staggers Rail Act on the cost of U.S. coal. Apparently, my experiences are not unique.

On September 19, 1980, Dr. Carroll L. Wilson, Director of the World Coal Study, testified before the Senate Energy and Natural Resources Committee in a hearing on coal exports. In reporting on the concerns about the U.S. that are expressed by steam coal importers in Europe and the Far East, Dr. Wilson reviewed some of the fears that had been expressed to him, stating:

"They also see a rail domination which would exclude supply by alternative systems such as slurry pipelines." (p. 262 of the transcript)

In the past, the security of the U.S. as a source of coal has offset successfully our price disadvantages of 15 to 40 cents per million Btu's in the Pacific Rim market. But we cannot rely on this "security" premium alone in the future. Competition from interstate coal pipelines can operate to moderate the transportation costs of our steam coal and assist the U.S. to compete in foreign coal markets.

As a matter of fact, the recent special U.S. coal trade mission to Europe led by Assistant Commerce Secretary William Morris, confirmed the fears of the European coal markets. The questions most often raised by the potential coal importers were the reliability of the U.S. as an exporter as well as the high cost of U.S. coal transportation since the passage of the Stagger's Act.

2. The U.S. Market

We must overlook the fact that U.S. coal must also compete for the growing U.S. steam coal market as well. The focus of that competition is not the mine-mouth price of coal, but rather the delivered price of coal, which includes the cost of transporting coal to its point of use.

My company intends to participate in the delivery of coal to the markets of Georgia and Florida through our Coalstream Pipeline. In 1980, 31 million tons of coal were used in the two states, with 9 million of the 31 million tons being used in Florida. Included in this figure are almost one million tons imported from foreign sources: 750,000 tons of steam coal were imported from South Africa by Gulf Power Company and 240,000 tons of coal were imported from Poland by Tampa Electric Company. All of the imported coal was used in Florida.

By 1990, the steam coal market of Georgia and Florida is projected to more than double to 84 million tons. U.S. steam coal will be forced to compete for this expanded market with not only Poland and South Africa but the developing coal production capacity of South America. For example, Exxon is developing the world's largest surface mine at Cerrejon, Colombia which reportedly will be in production by the mid to late 1980's. Utilities in Florida and Georgia are under an affirmative obligation to purchase the least expensive coal available to them. Thus, our eastern coal may simply lose much of the growing Florida and Georgia market to foreign coal unless the delivered cost of U.S. coal can compete with the delivered price of imported coal.

D. Will Be An Environmentally Superior Mode of Transportation

Pipelines offer significant environomental advantages over other modes of transportation. Coal pipelines are noiseless, safe and underground. Coal pipelines do not interfere with other surface activities; do not emit dust or create noise problems; and are not affected by the hazards of weather. The noise levels of trains can be objectionable in cities and towns, especially in small towns where the rights-of-way often pass through residential neighborhoods. In addition to noise pollution, rail traffic contributes "nuisance" pollution at grade crossings through the interruption of automotive traffic and the disruption of normal activity in small towns, especially where the rail line passes through the center of the town.

E. Other Benfits of Interstate Coal Pipelines

In February, 1980, National Economic Research Associates (NERA) completed an assessment of the economic and energy benefits of our Coalstream Pipeline. Assuming that all of the incremental utility coal market and a portion of the industrial coal market in Georgia and Florida would be transported by coal pipeline, the NERA study projected the following cumulative economic and energy benefits from the project for the decade 1990-2000:

(1) A saving of 633.2 million barrels of diesel fuel, No. 2 heating oil and railroad fuel;
(2) A saving of $4.8 to $9.2 billion in transportation costs to utility customers;
(3) A saving of $19 billion in the nation's balance of payments;
(4) The creation of 5,200 new coal mining jobs; and
(5) An increase in coal industry revenues by $432 million per year.

III. NEED FOR FEDERAL EMINENT DOMAIN LEGISLATION

Interstate coal pipelines can be built without Federal financial assistance. Interstate coal pipelines cannot, however, be built in most instances unless Federal legislation is enacted extending the Federal right of eminent domain to interstate coal pipelines. Proof of this reality exists in the fact that no major interstate coal pipelines have been developed in this nation during the 20 years since Federal eminent domain legislation was first submitted to Congress in 1962.

Faced with active railroad opposition, state legislatures cannot deal effectively with the issue of eminent domain for coal pipelines in their usual abbreviated sessions, particularly when the fundamental issues of providing essential state services are today so difficult and time consuming. These practical problems are particularly true in those states through which pipelines must be built, but in which coal is neither picked up nor delivered. In fact, such states may encounter legal difficulties in identifying benefits to their citizens that would support the grant of state eminent domain authority to such coal pipelines. In fact, similar experiences led to the amendment of the Natural Gas Act in 1947 to grant the Federal power of eminent domain to interstate gas pipelines. (See Attachment 7).

Attempts to build interstate coal pipelines without Federal eminent domain authority and to encourage the enactment of appropriate state eminent domain statutes have not been notably successful. The experiences of ETSI Pipeline Project are most instructive in this regard.

ETSI's right-of-way acquisition for the 1386 mile main coal pipeline began in 1975. ETSI found that the greatest difficulty encountered was in securing permission to cross under the various east-west railroad routes which had to be crossed in the southeasterly pipeline routing. ETSI officials initiated contacts with the various railroads involved in an attempt to negotiate easements or licenses to cross under the track beds located across the proposed route. The ETSI representatives were refused crossing permits in every instance. Also, at about this time, ETSI was informed by federal officials that action would not be undertaken for preparation of an environmental impact statement until ETSI had demonstrated that railway crossings could be secured. This meant that the long schedules normally occasioned by the National Environmental Protection Act process of demonstrating the environmentally sound manner in which the system would be built and operated would be compounded by protracted efforts to secure crossing approvals. I might add that in ETSI's final EIS issued by the Bureau of Land Management, ETSI's coal slurry pipeline was found to be an environmentally sound way to transport coal.

Faced with railroad refusals to negotiate, ETSI undertook what was termed the "window program" for obtaining rights-of-way from the railroads. Extensive title searches were made of the railroad land grants that lay across the proposed route. Records indicated that all the railroads ETSI crossed were built under the Federal Railroad Acts of 1862 and 1864. ETSI's land division identified crossing points at or near the pipeline route where the land in question was held as an easement under the Railroad Land Grant Acts rather than in fee ownership. ETSI then began an extensive process of legally challenging the authority of the railroads to deny crossing requests. It became necessary to institute 65 individual law suits against the railroads to establish ETSI's rights. ETSI's Window Program was completely successful at the trial court level as well as in appellate review by both the Eighth and Tenth Federal Circuit Courts of Appeal and the Oklahoma Supreme Court. See, *Energy Transportation Systems, Inc.* v. *Union Pacific Railroad Co.*, 606 F. 2d 934 (10th Cir. 1979. *Energy Transportation Systems, Inc.* v. *Kansas City Southern Railroad*, 638 F. 2d 459 (Okla. 1981).

Although this costly and time consuming litigation enabled ETSI to obtain rights-of-way to cross under the rail lines, it had to realign the pipeline so that it would cross at the windows opened by the courts.

This legal process added at least an additional two years to the preconstruction stage as well as substantial direct legal fees and an additional $50 million to projected construction costs. Fortunately, ETSI was successful in this protracted litigation and a precedent has now been set which could allow development of some western interstate coal pipelines that are capable of aligning their rights-of-way to fit the railroad ownership interests that were granted by Congress under the Railroad Acts of 1862 and 1864. Unfortunately, for coal pipelines in other areas of this nation, the Window Program approach is not feasible because the railroads own the underlying land in fee.

Our Coalstream Pipeline project simply cannot be built without legislation such as S. 1844 and H.R. 4230. Our pipeline must cross the lines of 11 railroad companies a total of 170 times from West Virginia and Illinois to Florida. Of the eleven states through which our pipeline could be routed to reach Georgia and Florida, only three grant eminent domain authority to coal pipelines—Florida, Ohio and West Virginia. West Virginia's statute contains several restrictions that render its usefulness very doubtful.

Our experience in Florida might be particularly instructive on the difficulties that are encountered in obtaining workable state eminent domain authority for coal slurry pipelines. My company, Continental Resources Company, operates the Florida Gas Transmission pipeline that has supplied most of the natural gas to Florida for 20 years. We are headquartered in Florida. Our Florida utilities are switching to coal. The Florida utilities and state public service commission support the need for delivering steam coal to Florida at the lowest possible cost. Yet, we had to fight railroad opposition to state coal slurry pipeline legislation at two successive legislative sessions before the Florida coal slurry pipeline eminent domain statute was enacted. The result: Florida's statute does not become effective until all states along our route enact eminent domain authority for coal pipelines. Some of the recent experiences of pipeline proponents in attempting to obtain state eminent domain authority are set forth in Attachment 8.

As I indicated previously, similar difficulties led to the amendment of the Natural Gas Act in 1947 to grant Federal eminent domain authority to interstate natural gas pipelines; the enactment of the Cole Act in 1941 to grant Federal eminent domain authority to several interstate petroleum pipelines that now transport a large percentage of the petroleum products consumed in the Washington area; the grant of Federal eminent domain authority to the land grant railroads (Santa Fe, Union Pacific and Burlington Northern) in the 1860's; the grant of Federal eminent domain authority to interstate bridge companies and to certain interstate electric transmission projects. Because the railroads refuse to admit that any railroad had Federal eminent domain authority, I would like to attach copies of some of the statutes that granted such authority to the railroads. (See Attachment 9).

The enactment of Federal eminent domain legislation in each of these instances allowed the development of these interstate energy and transportation facilities that have provided enormous benefits to our nation and literally have changed the face of our country. The adoption of this Federal eminent domain legislation will enable the nation to realize the substantial benefits of interstate coal pipeline systems.

IV. SUPPORT FOR S. 1844

The Slurry Transport Association and my company strongly support the adoption of S. 1844, the Coal Distribution and Utilization Act. We also support the enactment of H.R. 4230 including particularly the version of that legislation that was recently ordered by the House Public Works and Transportation Committee. I would like to deal with the provisions of Section 6 of S. 1844 which deal with the protection of state water law.

The most controversial aspect of interstate coal pipelines is that fact that most coal pipelines that are being considered today will use water as the medium of transportation. The allocation and use of water is an issue of great importance in every region of our nation. The issue is of particular importance, obviously, in those regions of our nation where water is relatively scarce, such as certain areas of the West and Southwest.

As proponents of coal pipelines, we strongly support Section 6 of S. 1844 (and Section 10 of H.R. 4230) which provides that decisions concerning the allocation and use of water shall be made pursuant to state substantive and procedural law. In addition, we support the Wallop Water Amendment which provides that Federal eminent domain authority may not be used to "acquire any right to take, use, dispose of, or develop water". This language was carefully crafted by water law experts who testified at Senate Energy Committee hearings and reflects their suggestions. Stated succinctly, we believe that the states would have the right to make the water decisions regarding coal pipelines.

Those states possessing coal reserves are faced with a fundamental decision: whether or not to develop those reserves. If the decision is in favor of development, and I know of no state that has determined not to develop coal, then the state must determine what to do with the coal that is mined. At that point, the state has at least four alternatives available to it.

First, the state can export the coal via train. Trains are not water intensive, but trains do create additional problems of congestion and safety. Second, the state can support the development of facilities to liquefy or gasify the coal in the state and then export the liquid or gaseous product by train or pipeline. However, liquefying coal requires the same amount of water as does a coal slurry pipeline and gasifying coal requires twice as much water as a coal slurry pipeline. (See Attachment 10). In addition, these large synfuel facilities may create other significant socio-economic impacts. Third, the state could support the development of mine-mouth electric generating facilities. But such facilities require up to five times as much water as do coal slurry pipelines. (See Attachment 10). Mine mouth electric generating facilities also create substantial socio-economic impacts and necessitate the construction of overhead electric transmission lines that some people find to be both obtrusive and inconvenient. Finally, the state could opt to support the development of coal pipelines that are constructed underground and are less water intensive than several of the alternatives.

We are not asking the Federal government to override the water decisions of the states. Most pipelines cannot be built without water. A decision on water usually determines whether a pipeline will be built. Pipeline companies understand that they will be required to carry the burden of demonstrating the existence both physically and legally of adequate water supplies. They will have to prove, either through new appropriations of water or through purchase and transfer of existing water rights, that pipeline use of water can be made without injuring the rights or impairing the ability of state water agencies to plan and regulate the use of their critically important water supplies.

We are perfectly happy to make our case to the states and live with their decision. However, we believe the states should have assurances that the water provisions of S. 1844 which: (1) clarify that Federal eminent domain authority may not be used to acquire water rights; (2) clarify that nothing in S. 1844 shall be construed to override or modify state water law or any provision of an interstate water compact; (3) provide that all water allocated to an interstate coal pipeline that is determined to be in the national interest must be allocated pursuant to state substantive and procedural law; and (4) provide that those terms and conditions that a state includes in a water permit shall be enforceable despite the fact that the water moves in interstate commerce.

V. CONCLUSION

Mr. Chairman, the case for interstate coal pipelines is compelling. Interstate coal pipelines will provide significant energy and economic benefits for the nation. But these interstate systems simply will not be developed unless workable Federal eminent domain legislation, such as S. 1844, is enacted. We encourage the enactment of this legislation expeditiously in order that these projects may begin to be developed.

Thank you.

APPENDIX

COMPARISON OF ENERGY USE BETWEEN UNIT TRAINS AND COAL SLURRY PIPELINES

(By Walter R. Hibbard, Director, Virginia Center for Coal and Energy Research, Virginia Polytechnic Institute and State University, April 2, 1982)

EXECUTIVE SUMMARY

A recent and widely reported study [1] by the Congressional Budget Office (CBO) outlines the energy cost for moving freight by various modes and includes a comparison of railroads and slurry pipelines in transporting coal. The study found that long-haul unit trains were more energy efficient than short-distance slurry pipelines.

This Center's report critiques the CBO study, nothing that the comparison between unit trains and slurry pipelines needs more balance. It also presents results of a Virginia Center for Coal and Energy Research (VCCER) study showing that for similar distances, terrain, and capacity, unit trains and slurry pipelines are about even in their energy use. On the basis of this study, it appears that energy efficiency is not a determining criterion for making a selection decision betwen unit trains and slurry pipelines.

REVIEW OF THE CBO REPORT AND ITS DATA SOURCES

The Congressional Budget Office (CBO) has released a study entitled "Energy Use In Freight Transportation," dated February 1982, which was prepared for the Commerce, Transportation and Tourism Subcommittee of the House Committee on Energy and Commerce.

The study estimates the energy efficiency of various freight transportation modes, in terms of Btu per ton-mile, includes not only the propulsion energy but also vehicle-manufacturing energy, construction energy, and the effect of circuity as well as refinery losses. The energy for empty movements, and for the non-cargo weight of the vehicle are also accommodated.

The CBO study results, as taken from the printed study, are outlined in Summary Table 1.

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[1] Staff Working Paper, Congressional Budget Office, "Energy Use in Freight Transportation," Washington, D.C., February 1982.

SUMMARY TABLE 1.—ESTIMATES OF TYPICAL FREIGHT ENERGY EFFICIENCY

[In Btu's per ton-mile of cargo]

Mode	Modal energy [1]
Rail:	
Overall	1,720
TOFC [2] (b)	2,040
Unit coal train	890
Truck: Average intercity	3,420
Barge:	
Overall	990
Upstream	1,280
Downstream	620
Air:	
All-cargo plane	28,610
Belly freight	3,900
Oil pipeline	500
Coal slurry pipeline	1,270

[1] Combines propulsion energy, maintenance energy, vehicle manufacturing energy, construction energy, and the effect of circuity, as well as refinery losses and the energy used for empty movements and for the noncargo weight of vehicles. 1 gallon of diesel fuel contains on the average 138,700 Btu's (British thermal units) of energy, and a gallon of gasoline 125,000 Btu's. A ton-mile represents the movement of 1 ton a distance of 1 mile.

[2] Trailer on flat car.

The news media reports of the study have focused on the conclusion that coal can be moved by unit train for one-third less energy per ton-mile than by coal slurry pipeline.

An analysis of the base components of energy use employed by the CBO is shown in Table 1 as taken from the study.

TABLE 1.—ESTIMATES OF BASIC COMPONENTS OF ENERGY USE FOR SIX MODES OF FREIGHT TRANSPORTATION

[In Btu's per net ton-mile]

Mode	Propulsion energy	Vehicle manufacturing energy	Construction energy	Maintenance energy	Circuity
Rail:					
Overall	660	90	200	180	1.52
TOFC	1,000	80	200	140	1.44
Unit coal train	370	60	100	60	1.51
Truck: Average intercity	2,100	100	300	300	1.22
Barge:					
Overall	420	40	50	30	1.83
Upstream	580	40	50	30	1.83
Downstream	220	40	50	30	1.83
Air:					
All-cargo plane	26,250	150	100	750	1.05
Belly freight	3,570	20	20	100	1.05
Oil pipeline	325	0	25	100	1.10
Coal slurry pipeline	1,000	0	50	100	1.10

As can be seen in the first data column, the major source of the unit train advantage lies in estimated propulsion energy which is nearly one-third of the coal slurry pipeline. The original summary of propulsion energy estimates studied in the CBO report, which led to the figures used in their report, is reproduced in Table A-8.

For the comparison between pipelines and trains in the CBO study, the coal slurry pipeline data were based partially on design estimates ranging from 410 Btu expended per ton-mile to 1740 Btu per ton-mile for a 1170-mile pipeline and a 200-mile pipeline, respectively. Also used by CBO was the actual operating data for the 273-mile, 4.8 million-ton per year Black Mesa pipeline which varied from 601 Btu per ton-mile to 4800 Btu per ton-mile. The Southern Pacific slurry pipeline operating data for Black Mesa are 1042 Btu per ton-mile and probably are the most reliable since the railroad has operated the pipeline from its inception.

TABLE A-8.—SUMMARY ESTIMATES OF PROPULSION ENERGY REQUIREMENTS

[In Btu's per ton-mile of cargo]

Mode	Range of estimates	Typical estimate	Estimate adjusted for energy losses in refining
Rail:			
Overall	550–690	630	660
TOFC	730–1,370	950	1,000
Unit coal train	220–410	350	370
Truck: Average intercity	1,400–2,530	2,000	2,100
Barge:			
Overall	250–500	400	420
Upstream		550	580
Downstream		210	220
Air:			
All-cargo plane	23,310–28,630	25,000	26,250
Belly freight [1]	3,300–29,950	3,400	3,570
Oil pipeline	160–540	325	325
Coal slurry pipeline [2]	410–4,800	1,000	1,000

[1] The wide range of estimates results from the use of 2 different methods.

[2] The wide variation results from different degrees of comprehensiveness (pumping energy alone as against coal preparation and dewatering as well), and also from the differences between engineering studies of large—as yet unbuilt—pipelines and the smaller scale line now in operation.

However, in the CBO study there was no mention of the Consolidation pipeline in Ohio which is 108 miles long and which carried 1.25 million tons per year when it operated. Data from a Consolidation Coal Report reprint from Coal, June 1964, implies 1097 Btu were used per ton-mile when pumping at only a 10,000 Btu per kilowatt hour heat rate.

To better understand our critique of the CBO report it is necessary to examine in more detail the source of the railroad and slurry pipeline propulsion data. The unit train propulsion energy data used by the CBO was based on estimates from the following sources.

	Btu/ton-mile
Conrail 1977	319
Office of Technical Assessment	340–580
Western Railroad Association	222
Coalstrip, Wyoming, to St. Paul, Minn.	400

Data from actual unit train field tests on propulsion energy were included as follows:

	Btu/ton-mile
Burlington Northern (1,264 miles)	256
Boston & Maine (4,114 miles)	412

When examining the data sources from the CBO report it becomes apparent that the study's slurry Btu expenditure estimates are based primarily on short, relatively small capacity coal slurry pipelines, while the unit train estimates are based on long, non-stop runs over level terrain.

Other groups have made similar observations about weaknesses in the CBO study. The Slurry Transportation Association, in a news release, critized the study based on the following rationale. The CBO study considered only unit trains which traveled non-stop on essentially level terrain. The study assumed a 20-year lifetime for hopper cars and equipment. The energy cost of freeze-proofing the coal in winter was left out of the railroad calculation. Several energy expenditures were included in the energy consumption figure for the slurry pipeline while a comparable process was not considered for the railroad. These coal handling and preparation processes were: grinding, washing, loading, product loss in transit, and unloading or switching costs.

SUMMARY OF VCCER SLURRY PIPELINE STUDY RESULTS

The VCCER has recently conducted a preliminary study[2] for a range of coal slurry pipelines from southwest Virginia to the Hampton Roads area. The study finds that propulsion energy efficiency is a strong function of distance and pipeline capacity as well as terrain.

Results from the investigation of four routes originating in Grundy or Big Stone Gap and terminating at Hampton Roads, were determined for six different capacity pipelines summarized as follows:

Annual capacity	Miles	Energy efficiency[1]
2.5 million tons	400	1,188
10 million tons	400	467
10 million tons	465	4578
25 million tons	465	227

[1] In Btu/ton-mile.

As can be seen, the larger the capacity and the longer the trip, the more energy efficient is the operation.

This same scaling effect should be expected to apply to unit trains. Data from the CBO report listed below indicate that this is indeed the case.

	Btu/ton-mile
1,264 miles (111 cars)	256
414 miles (91 cars)	412

In the CBO study these figures led to 370 Btu per ton-mile being accepted for the unit train as an appropriate average energy use. Our study suggests, for comparable distances and comparable carrying capacities, that 600 Btu per ton-mile is a more appropriate energy value for coal slurry pipelines than the 1000 Btu per ton-mile chosen by CBO.

COMPARISON BETWEEN UNIT TRAINS AND SLURRY PIPELINES

If 600 Btu per ton-mile is chosen as an average propulsion energy rate for the slurry pipeline instead of the less appropriate value used in the CBO study, then the conclusion one reaches in a comparison between slurry pipelines and unit trains is quite different. The specific comparisons using the same categories as the CBO study are as follows:

	Btu/ton-mile	
	Coal slurry pipeline	Unit trains
Propulsion	600	370
Vehicles	0	60
Construction	50	100
Maintenance	100	60
Circuity factor	(1.10)	(1.51)
Total energy/ton-mile	825	890

Given the uncertainties represented by all of these estimates, the two total energy per ton-mile values should not be regarded as significantly different.

This more realistic comparison leads to a much different conclusion than the CBO study. Indeed, it must be argued that when a comparison is made between strictly equivalent options of slurry pipelines and unit trains, it is not possible at this time to distinguish between these options as an energy basis alone.

The implications of our study and analysis of the data is that energy efficiency is not a determining factor in the decision between moving coal by rail or slurry pipeline. Other criteria such as capital, access, politics, and profitability, remain the major factors which will determine the choice between slurry pipelines and unit trains for moving coal.

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[2] Oner Yucel, Interim Report on a Preliminary Study of "Coal Slurry Pipelines in Virginia," Blacksburg, VA, Jan. 6, 1982.

Senator DANFORTH. Next we have a panel of: William Dempsey, Robert Claytor, Richard Grayson, Hays Watkins, and R. G. Flannery.

Mr. Dempsey, would you like to start?

STATEMENTS OF WILLIAM DEMPSEY, PRESIDENT, ASSOCIATION OF AMERICAN RAILROADS; ROBERT B. CLAYTOR, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, NORFOLK SOUTHERN; RICHARD C. GRAYSON, PRESIDENT AND CHIEF EXECUTIVE OFFICER, BURLINGTON NORTHERN; HAYS T. WATKINS, CHAIRMAN OF THE BOARD, CSX CORP.; AND R. G. FLANNERY, PRESIDENT AND CHIEF EXECUTIVE OFFICER, MISSOURI & PACIFIC RAILROAD CO.

Mr. DEMPSEY. Thank you, Mr. Chairman. We are grateful for the opportunity to be here and express the views of the railroad industry.

Senator DANFORTH. Why do you not withhold, Mr. Dempsey, until we can get a little order in the room? A lot of people are coming to the door now.

Mr. DEMPSEY. Most of them are going, I am sure.

Senator DANFORTH. They are rushing to pick up the text of your statement.

Mr. DEMPSEY. Thank you. I appreciate that. [Pause.]

Senator DANFORTH. Thank you.

Mr. DEMPSEY. Thank you, Mr. Chairman. I will summarize very swiftly the principal points covered in my written statement, and I will touch on some of the subjects you have talked about with previous witnesses.

No one, of course, is surprised that the railroad industry strongly opposes this legislation. Let me start with what we regard as the serious threats to the interests of the parties by the construction of the coal slurry pipelines.

I begin with the railroads themselves. Let me just give you a couple of figures that are verifiable to give you an order of magnitude of what we are talking about here. Consider Mr. Workman's testimony that the coal slurry pipeline, for example, would transport about 54 million tons of coal.

Senator DANFORTH. Could you speak more directly into that microphone, please?

Mr. DEMPSEY. That 54 million tons would constitute about 30 percent of the coal now being transported by the Southern Railroad. The idea that that somehow could be made up by increases in coal production to us is fanciful. If you take the 13 coal slurry pipelines now proposed, you are looking at about 250 million tons a year of coal. That is about half what the industry is now transporting.

Look at OTA, the Office of Technology Assessement's calculations. The OTA concluded that by the year 2000 in 1971 dollars the rail industry would lose net revenues of $688 million a year. That is more than we make. In 1980 we made $675 million net revenue. In other words, it is a wipe out of the rail industry.

At that point, it seems to me, given the experience of Congress with the Penn Central catastrophe, the wipeout of the Rock Island and the truncation of the Milwaukee Road in bankruptcy proceedings, what otherwise might be considered a private interest is transformed into a public interest.

Let me say this also. It picks up on a point Mr. Blanchette makes, and it is very important. Some of this, of course, would be taken out of new coal traffic, we would hope.

But the point here is that if the rail industry is to be moved from its present rate of return in the last 12 months of about 3 percent to the 16.5 percent the Interstate Commerce Commission has concluded is necessary as an adequate rate of return, we have got to look under any scenario to increased coal production as one of the key elements of the ultimate revitalization of the rail industry. So the fact that some would be taken out of new coal traffic is not relevant to that consideration that Mr. Blanchette underscored.

The impact on employment, Mr. Snyder will talk, too, about that. But, of course, we are deeply concerned with it. On extrapolation, we are looking at the loss of employment of about 10 percent of our present employment. Those are stable jobs. OTA concluded there would be only one coal slurry pipeline industry job substituted for every six rail jobs lost. The kind of coal slurry jobs we are talking about are boomtown kinds of jobs in construction work.

The water issue has been adequately treated. I note only that we, of course, agree that the *Sporhase* case throws a great cloud over any effort that can be made at a Federal level to protect the States. Downstream States that share aquifers, all of that seems to us to be of the utmost consequence and has not been satisfactorily solved by the proposed legislation.

On the other side, well, let me just go on by observing, as has been observed, if this traffic and this revenue is lost, the people who will suffer will be those who remain dependent upon rail service, the grain shippers.

Let me mention the smaller lines. You must have a reserve of about 100 million tons to hook up to a coal slurry pipeline. That is just the nature of the animal. The small lines on the Norfolk Western—take that as an example—there are about 200 mines, only five with reserves of 100 million tons. The small coal operators then would have to pick up the slack.

And what we are talking about is the diversion of the best business. It is the high-volume movements from a few sources to a few destinations, the kind of movements we handle on our unit trains most efficiently. They take away the best busines and leave the railroads with the rest. And because of our fixed costs remaining essentially the same, the slack would have to be taken up by the remaining shippers.

Senator DANFORTH. The slack meaning what?

Mr. DEMPSEY. Meaning that revenue which we lose, which is necessary to cover our fixed costs, would simply have to be loaded onto the rates made.

Senator DANFORTH. So the small coal producer would end up in a weakened economic position?

Mr. DEMPSEY. Yes. Precisely. What can be said then in defense of this kind of proposition? I think it is no longer asserted—I listened to Mr. Workman and I have read his statement—I think it is no longer asserted that the railroads cannot handle the business. As Mr. Blanchette said, we certainly can. That capacity has been demonstrated by our experience and by every disinterested study that has been made: The DOT study, the OTA study, the Bureau of Mines study. And it just does not seem there is any room left for reasonable debate on that point.

So now we move to the question of rates and competition. I would like to, if I may, supplement my statement by giving you some figures on coal rates, Mr. Chairman, because you observed quite rightly that from time to time it is claimed the Staggers Act has led to an explosion in coal rates. It simply has not.

As a matter of fact, the coal rate increases after Staggers have been less than about 12 percent. They have been less than the 16 percent a year for the preceding 5, 6, or 7 years. And I would like to get that in the record, if I may.

But the point that is generally made is not so much that real rates have exploded, because, as I say, they really have not. Indeed, rail rates have gone up over the last 10 years at a lesser pace than the price of coal itself. So that the rail cost component of the laid-down price of coal is less now than it was in 1971.

But the point that is usually made then is that there ought to be competition. We are not opposed to competition in our industry. We have supported Staggers, and that has led to increased competition. What we are opposed to is unfair competition. We would like to play on a level field. And this is no criticism of the coal slurry pipeline interests at all.

But in the nature of the animal, they cannot be equal competitors, because they cannot be common carriers. We have to be common carriers. We have to serve everyone. And they cannot be, no matter what is written into the law.

I would like to put it this way, just by way of closing. I think that people get bemused sometimes by the technology. This looks like a unique kind of animal we are talking about, and Americans like that sort of thing. But if you strip it of its bells and whistles, what we are dealing with is simply a transportation system. It performs exactly the same function as a railroad.

Now, if a group of entrepreneurs came to Congress and said, look, we think we can make a profit if we can build a rail line parelleling the existing line between these two points, but in order to do that—and we think we can undercut the railroads—but to do that we must serve only these few people; we cannot be called upon to be common carriers. Now, we need your help. Write us a bill to give us the power of eminent domain to do that.

I suggest they would be laughed off the Hill. And I respectfully suggest that that is precisely the treatment that should be given to this proposal. Thank you, Mr. Chairman.

[The statement follows:]

STATEMENT OF WILLIAM H. DEMPSEY, PRESIDENT, ASSOCIATION OF AMERICAN RAILROADS

My name is William H. Dempsey. I am President of the Association of American Railroads, a trade association representing the nation's freight railroads. Our members operate approximately 94 percent of the nation's railroad mileage, haul approximately 98 percent of the nation's railroad traffic and employ 92 percent of the nation's railroad workers.

I appreciate this opportunity to share with you the railroad industry's views on S. 1844, the proposed Coal Distribution and Utilization Act of 1981.

As you know, this legislation has previously been reported by the Committee on Energy and Natural Resources. I am pleased that the Subcommittee on Surface Transportation is now reviewing this legislation, because it is, in my opinion, the appropriate forum.

Coal distribution involves transportation, and the principal proponents of this legislation are the Slurry Transport Association and the Alliance for Coal and Competitive Transportation.

And as this Subcommittee is acutely aware, it is the concept of common carriage that lies at the heart of our nation's transportation infrastructure.

After all, when we strip away from coal slurry pipelines the technological bells and whistles which may bemuse us, what we really have is less than a railroad—transportation limited to a single commodity, transported within a pipe instead of on steel rails. Coal pipelines are not now nor will they ever be common carriers. What they are is a threat to common carriage.

Let me illustrate this point. For a moment, assume that it is railroad interests rather than pipeline interests which have come before you. Assume that these railroad interests want to construct a single-commodity railroad which will haul only coal — coal diverted from existing common carriers.

All that is needed to construct this single-commodity railroad, you are told, is freedom from the common carrier obligation, so that the proposed railroad need not transport any commodity except coal—and then only in "economical" unit trains of 100 or more cars from single origin to a single destination.

Would you consider such a request? I suspect you would laugh the proponents off of the Hill. A non-common carrier railroad to haul coal, and only coal, in quantities set by the railroad? You would be beseiged, and rightly so, by remaining rail shippers who would be forced to maintain the remnants of vast—and expensive—common carrier rail plant.

As affected shippers would point out, the diversion of coal from existing common carriers will not only unjustly force their rates up, but will also result in the per unit price on all remaining commodities to exceed the realized savings per unit on the diverted coal tonnage. "Where lies the public interest?," they will ask.

But how is a coal slurry pipeline different than a single-commodity, non-common carrier railroad? Won't the effects on the shipping public from coal pipelines be equally severe as from single-commodity, non-common carrier railroads? Of course they will.

There is absolutely nothing that coal slurry pipelines offer that railroads cannot already do—if we are willing to forsake the common carrier obligation.

Thus, you can understand why we think it so important for this Subcommittee, with its specialized knowledge regarding the importance of common carriage to the commerce needs of this nation, to be considering this legislation.

Clearly, America's freight railroads have a legitimate self-interest in this legislation. S. 1844 provides for federal intervention on behalf of coal pipeline proponents and will have a marked and negative effect upon common carrier freight railroads which, after decades of financial anemia—and even bankruptcies—are finally on the road to recovery.

The Staggers Rail Act of 1980, coupled with significantly increased coal traffic, has had a positive effect on freight railroads. Yet, S. 1844 could wipe out those gains and threaten nationalization of our industry as a number of ailing roads again find no place to turn but to Congress' doorstep.

And for what? A redundant form of coal transportation for which there has been demonstrated no public need.

THE RAILROAD INTEREST

Coal is the single most important source of railroad traffic and revenues. Railroads currently move about two-thirds of the nation's coal production. In 1981, coal accounted for 35 percent of our total originated tons, and 18.4 percent of our total operating revenues.

Construction of the coal slurry pipelines currently proposed could siphon from the railroads much of the profitable high-volume coal we now haul—coal which is moving less expensively than most other railroad commodities and which is making major contributions to the large fixed costs incurred in railroad operations.

Coal slurry pipelines will seek to siphon away the high-volume—and only the high-volume—coal traffic which is the most profitable portion of the coal transportation business.

Because pipelines cannot function as true common carriers, they would select only premium traffic, leaving railroads—common carriers in fact as well as in name—to serve those shippers not desirable to the pipelines. This is what is meant by the term "cream-skimming."

Even if increased domestic and export coal consumption "enlarge the pie" so as not to reduce the absolute coal tonnages hauled by railroads—and this is hardly assured—the railroads would still be significantly disadvantaged. This is because coal pipelines would siphon only the "large mine" traffic which now moves in unit trains. The railroads would be left with predominantly one- and two-car coal shipments—the relatively high-cost traffic which would necessitate rate increases.

Railroads would still have to maintain their vast network of track, yards, terminals and other facilities for remaining coal and, of course, all the other commodities railroads haul. But because the most profitable of that traffic would be lost to the pipelines, the remaining traffic would be forced to absorb a disproportionate share of remaining fixed costs.

Some shippers might not be able to afford those higher rates. They would be forced out of business. This is especially so for smaller coal mines which could not afford to compete against the larger mines served by pipelines.

I do not mean to imply that the railroads fear legitimate competition—from pipelines or any other mode. But true competition would not take place between railroads and coal slurry pipelines. Not one mile of pipeline will be built until the entire capacity of the proposed pipeline is committed, in advance, to long-term "take-or-pay" contracts.

Thus, once a slurry pipeline is constructed, no competition can take place. No amount of rate-cutting or imaginative marketing by the railroads can regain that traffic. Nor, in the alternative, can railroads attempt to market all of their future capacity under contracts as may slurry pipelines. This is because we remain common carriers in fact, required by law to reserve capacity for "all comers."

THE PROBLEM WITH TAKE-OR-PAY CONTRACTS

Let me return a moment to long-term "take-or-pay" contracts. I have attached to my statement, as Appendix I, a copy of a front page news article from the September 2 Washington Post, headlined "Natural Gas Surplus Leads to 20 Percent Price Rise."

Quite simply, a long-term "take-or-pay" contract for natural gas is preventing the use of lower cost, alternatively sourced natural gas, and natural gas consumers are going to be forced to pay at least 20 percent higher utility rates for that higher-priced gas this winter.

This is precisely the situation buyers of coal—and the electric utility customers depending up that coal—could find themselves in if slurry pipelines are built.

Railroads have the flexibility to move coal from a multitude of origins to a multitude of destinations. With coal mines competing among themselves to sell coal to utilities, and with railroads competing among themselves and with barges to haul that coal, those buying coal retain the flexibility to find the lowest price coal—or alternative fuel—and to transport it at the lowest market rate. And if that is not enough, the Interstate Commerce Commission retains jurisdiction over rail coal rates where market dominance exists.

Flexibility is no small matter. Pipelines are not mounted on swivels. A pipeline can only move coal from a fixed origin to a fixed destination. Railroads can meet market necessities by moving coal south one day, east the next and west the day after that. A few years ago, during a strike at eastern mines, utilities, factories, hospitals and schools dependent upon coal were able to obtain western coal by railroad on virtually overnight notice. Coal pipelines offer no such flexibility.

Pipeline capacity constraints are also a problem. Pipelines will not be built until contracts are in hand for the full capacity of the pipeline. In the face of a mine strike, buyers could not build inventories by increasing pipeline deliveries. After the strike, the pipeline could not deliver additional quantities of coal. The amount of coal which can flow through the pipeline will be fixed from its first day of operation. A shutdown of the pipeline, whether resulting from a pipeline malfunction or a work stoppage at the mine(s) feeding the coal, can never be made up by increased volume movements at a later date.

No factory, school, hospital or utility has ever shut down because railroads were unable—or refused—to meet a sudden or even sustained demand for additional coal shipments.

HOW WILL RAILROADS SUFFER?

Let me now explain how coal pipelines will negatively affect the ability of railroads to remain reliable and consistent transporters of coal.

Coal is the backbone of railroad traffic. It makes a significant contribution to our high fixed costs, and provides revenues vitally needed to attract investment capital for expanded and upgraded track, yards, terminals and transportation equipment. A massive shift of profitable coal from railroads to pipelines would have a draconian effect on railroad balance sheets by notably reducing revenues without allowing similar reductions in high fixed costs. Those fixed costs will remain because despite the loss of profitable high-volume coal shipments, railroads will still have to provide virtually the same fixed facilities to move the one- and two-car coal shipments and the multitude of other industrial and consumer goods traveling the rails.

Let me again illustrate my point. Consider the proposed Coalstream pipeline. It is designed to transport 55 million tons of coal annually from Southern Illinois, Kentucky and West Virginia to utilities in Georgia and Florida. Since the creation of this or any other pipeline will not increase the demand for coal, whatever Coalstream hauls will have to be diverted from other modes, such as railroads.

In 1980, the Family Lines Rail System (which includes the Louisville and Nashville Railroad), the Southern Railway System, and the Illinois Central Gulf Railroad combined carried 181 million tons of coal. If 55 million tons of coal annually are lost to the Coalstream pipeline, that will represent 30 percent of those railroads' total coal traffic. The effect on those railroads will be devastating.

But the effect would also be dramatic for eastern railroads, such as Chessie System, Norfolk and Western, or Conrail, since much of the cost hauled by southern railroads is originated from these three eastern carriers.

Recognize that Coalstream is but one of 13 coal slurry pipelines seriously proposed which, combined, could transport more than 250 million tons of coal annually.[1]

What makes this traffic diversion even more acute is that the bulk of the coal traffic remaining on the rails will be the much less profitable one- and two-car shipments, as our unit train traffic will shift to pipelines.

In 1980, the Congress passed the Staggers Rail Act which provided for substantial deregulation of the railroads. While provisions of the Staggers Act were designed to increase competition in transportation—and indeed have had that effect—the underlying purpose of the Staggers Act was the revitalization of the nation's rail systems through the mechanisms of private enterprise. The Staggers Act represented a recognition by the Congress that, without improved earnings, the railroads would slide into financial ruin and eventual nationalization.

Following passage of the Act, railroad earnings improved somewhat. In the current recession, however, continued strong coal traffic has been the major factor in keeping railroads solvent.

Loss of significant portions of the most profitable of this traffic and of opportunities for participation in its growth would severely harm the relatively healthy railroads. For railroads just beginning to emerge from "marginal" status, it would prove devastating.

This fear is confirmed by the Congressional Office of Technology Assessment (OTA). A 1978 OTA report estimated that by the year 2000 railroads would lose some $688 million in net railway operating revenues—as measured in 1971 dollars—as a result of coal diversion to slurry pipelines. Most of this loss—some $628 million—would be suffered by western railroads.

Using 1971 dollars, last year the entire railroad industry reported net railway operating revenues of only $675 million—of which $366 million was reported by western railroads. This revenue diversion would certainly have been enough to put the industry as a whole into the red. The effect on western railroads would be catastrophic.

What makes this even more devastating is that it was based on the number of pipelines proposed in 1978. Since then, additional pipelines have been proposed Their construction would make the position of the railroad industry even worse than was forecast by OTA.

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[1] Based upon public presentations by coal slurry pipeline interests. These pipelines include: San Marco, Allen-Warner (2), ETSI, Coalstream, NICES, VEPCO, Texas-Eastern, Pacific Bulk, PRPI, Texaco, Staten Island, and Colorado River.

And it would not even be necessary for the coal traffic to be lost. We have seen renewed investor confidence in railroads since the Staggers Act, but that confidence would be undermined if the passage of federal eminent domain for coal slurry pipelines clouded the prospects for continued growth in rail coal traffic.

It is important to note that the passage of the Staggers Act came because Congress recognized that a healthy railroad system is essential to the maintenance of an effective national transportation system. A public policy which risks crippling an existing essential industry in order to foster one which cannot lay any convincing claim to the public interest—let alone one of essentiality—is without logic.

THE PUBLIC INTEREST

Indeed, I would assert that the true public interest lies in denying special privilege to the promoters of coal slurry pipelines.

First, let us examine the claim that public interest requires that slurry pipeline builders be granted the extraordinary power—on the federal level—to obtain land regardless of the wishes of the owners or of the citizens and governments of the states through which the pipelines would pass.

For many years, it has been claimed that coal slurry pipelines were needed to provide additional capacity for the transportation of needed coal.

These claims should have been laid to rest when the Office of Technology Assessment, in a 1978 study mandated by Congress, said that: "The capacity of rail systems can be expanded faster than can coal mining or electric power generation using coal, provided the necessary investments in local rail facilities are made."

If that was not enough, the U.S. Department of Transportation's Coal Transportation Task Force, in the same year, stated: "In many instances . . . the rail coal hauling capacity already exists and the expected new traffic will allow the railroads to make better and more efficient use of their heavy past investments." And "(it) appears that both the health and marginal railroads are finding bright prospects in investments in coal hauling facilities."

These findings have been validated by the marketplace. For the past three years, railroad coal traffic has been at record levels. Nevertheless, excess coal-carrying capacity has existed on the railroads during this period.

As I mentioned, the National Coal Association sees only about a 4.5 percent average annual increase in production through the end of the century. This growth hardly presents a problem to the railroad industry, which handled a 47 percent a problem to the railroad industry, which handled a 47 percent increase in total coal movements and 95 percent increase in export coal over the past 10 years. I further point out that the U.S. Department of Commerce reports that "we have reached a plateau in coal exports," and the "surge" in coal exports experienced in 1980 and 1981 will not recur.[2] William Morris, the Commerce Department's assistant secretary for trade development, further told a recent coal conference that we already have in place the infrastructure to handle all future coal transportation demands.[3] The numbers attest to that statement.

During an extended period in 1981, the railroads were called upon to carry a level of coal traffic which implied a capacity of 680 million tons per year—136 million tons more than was actually moved. It is important to note that they handled this traffic with no requirement for additional trackage or cars. In fact, coal cars remained in surplus during the entire period.

And as I speak to you today, the nation's freight railroads have sitting idle more than 42,000 coal hoppers, which represents an idle coal-hauling capacity of some 74 million tons—or about 9 percent of current annual U.S. coal production.

Such additional coal traffic as develops will not be a problem—it will be a solution.

Thus, it should be clear that there is no "excess" coal production for coal slurry pipelines to absorb. Any coal business sought by pipeline companies will be tonnage presently moving by rail or which could readily be absorbed by the existing rail system.

Why should government promote such a shift in coal traffic when the railroads already have the ability to efficiently handle the traffic, and when such a shift will be financially devastating to an industry which has been fighting for economic survival?

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[2] Remarks before "Coal under Reagan Conference," Mar. 2, 1982, Loews L'Enfant Plaza Hotel, Washington, D.C.

[3] Ibid.

It should be equally clear that coal slurry pipelines can make no claim that the public needs their services. They would, in fact, provide redundant capacity.

Claims of Savings Doubtful

Slurry pipeline promoters also claim, as a justification for federal eminent domain legislation, that coal slurry pipelines would offer savings to utilities and consumers of electric power.

While this claim has been heard many times, very little of a concrete nature has been offered to support it.

For example, construction cost estimates have proven extremely elusive, and those which have been given must be viewed with doubt.

Promoters of the Coalstream pipeline have estimated construction costs of $1.5 million per mile, or about $2.25 billion for the 1,500-mile pipeline. But cost estimates for pipelines have proven extremely elusive, and those which have been given must be viewed with doubt.

We shouud recall that the Alaska oil pipeline was originally estimated at a cost of $800 million—but final cost was about $9 billion. The original estimated cost for the controversial Alaska-Canada natural gas pipeline was $10 billion. The most recent cost estimate for this pipeline is $40 billion—about $8.3 million per mile. Thus, any projection pipeline costs must be considered suspect.

Certainly terrain and climate conditions for those pipelines are different than those which would be encountered by coal pipeline builders in other regions—but that is the point. The only thing pipeline projects seem to have in common is that they cost far, far more than was estimated, and their alleged cost advantages are largely dissipated in the process.

Thus, any projection of pipeline rates which is based on preliminary construction cost assumptions must be considered suspect.

Indeed, in testimony before the House Subcommittee on Commerce, Transportation and Tourism August 6, financial consultant Thomas E. Dewey, Jr., testified that the capital cost charge for coal pipelines alone could rise to $28 per ton—and capital costs represent only about two-thirds of total costs for coal pipelines. Thus, full costs could easily exceed $42 per ton. And, Mr. Dewey pointed out, those figures are based upon cost estimates supplied by pipeline promoters.

Railroads, meanwhile, which already have all facilities in place and well-maintained, charge an average of 2.25 cents per ton-mile to haul coal. Even for a 1,000-mile haul, the delivered price of coal by railroad—all costs, including a reasonable profit, covered—would not exceed $22.50 per ton.

The Congress should not ignore the possibility of massive cost overruns making coal pipeline transportation uneconomical absent federal subsidies.

Though capital costs for slury pipelines remain a mystery, many pipeline promoters still insist that coal pipelines will save money for consumers. One group—the promoters of the Coalstream pipeline—has been more specific. Let us examine their claims.

In a study financed by Coalstream, the consulting firm of A. T. Kearney, Inc., projected considerable savings.[4] However, the Kearney study began with the assumption that railroads would set coal rates at the maximum level that could be charged without Interstate Commerce Commission intervention.

But the vast majority of coal rates are not now set at that level and probably never will be set at such a level. Railroads are as vulnerable to a loss of traffic from non-competitive pricing as are supermarkets or drugstores. Railroads not only compete with each other, but railroads compete with barges as well. Also, non-competitive pricing of domestic coal can lead to importation of foreign coal, or a shift to another energy form.

Since 1971, increases in railroad coal-hauling rates have lagged well behind increases in the mine-mouth price of coal, and coal continues to move on the railroads at a lower rate per ton mile than most other commodities.

Indeed, the history of railroad ratemaking, as it regards coal, shows that railroads have been generally cognizant of the need to protect their markets. Thus, in the 1950s and 60s when demand for coal was relatively low, railroads reduced rates to encourage sales. As coal production and use have increased, railroad rates have climbed along with coal prices—but rail rates have not climbed nearly as fast as coal prices. This is demonstrated by the fact that, nationwide, the rail transportation portion represents a lesser percentage of the total delivered price of coal than it did 20 years ago, even though we are hauling coal considerably longer distances today.

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[4] A. T. Kearney, Inc., "Comparision of Projected Maximum Rail and Coal Slurry Pipeline rates for Transporting Coal to Selected Southeast Utilities", May 1981.

Thus, the Kearney study can be seen to be flawed as to its estimates of future rail coal rates.

We cannot know if the study is flawed with regard to pipeline rates, because these estimates were supplied to Kearney—without accompanying methodology—by Fluor Ocean Services, Inc. The Kearney report noted this and disclaimed responsibility for the validity—or lack thereof—of the pipelines rate estimates.

Another study for Coalstream was done by National Economic Research Associates, Inc.[5] This study concluded that the Coalstream pipeline could save residential consumers of electric power in Georgia and Florida some $31.3 million in 1990—and still more in later years.

However, to arrive at this savings, NERA has to assume that no coal would be transported to those two states by any other mode.

Obviously, this assumption is invalid.

Still, let us consider that figure of $31.3 million in 1990. Suppose it were true? What would it mean?

If you divide the total number of affected households into $31.3 million, you learn that each householder in those two states would save less than $5.70 per year—or about 47 cents per month.

This, of course, assumes that the population in 1990 will be the same as that in 1980. It would be more reasonable to assume a greater population and a greater number of households. In that case, the individual savings would be less.

Forty-seven cents per month is not a significant savings today. It hardly seems worth waiting for until 1990.

This is especially true when you consider that the underlying rationale by which pipeline proponents support their economic claims is that continued high inflation will push rail rates to a level above pipeline rates—because pipelines would be more resistant to inflation.

If one assumes a high rate of inflation between now and 1990, then a savings of 47 cents per month—insignificant today—becomes invisible.

It should also be noted that the rate of inflation has been slowing in recent months. Should this trend continue, the pipeline rationale will be rendered totally invalid.

Another feature of today's economy is the difficulty in obtaining long-term capital. Even a conservative estimate of pipeline construction costs indicates that the pipelines now in the planning stages would require some $30 billion in financing.

During 1979, all of American industry combined was able to generate about $120 billion from external capital sources—either debt or equity.[6] Since slurry pipelines would be new ventures and would not have retained earnings, they would have to seek external financing. A sudden demand for $30 billion in new capital at a time when markets are hard-pressed to meet the needs of existing industry, and when government borrowing is increasing, could push interest rates to new highs with attendant adverse effects on the nation's economy.

In such an environment, it is unlikely that pipeline backers will be able to secure long-term financing. It is more reasonable to assume that they would borrow short-term money and hope to re-finance later at more advantageous rates. If so, however, they cannot possibly predict their future rate levels—much less their own long-term viability given such massive leveraging during such uncertain times.

Another claim made by pipeline proponents is that pipelines would provide a form of "competitive discipline" to hold railroad rates down. What this apparently means is that railroads, fearing pipeline incursions, would keep rates low to discourage customers from switching. This claim falls apart when you note the fact that no pipeline will be built until almost its entire capacity has been committed to long-term contracts.

Once built, the pipeline will monopolize its traffic—but it cannot attract any additional traffic. There will be no room. Nor will the pipeline's customers be able to switch to other forms of transportation because of their take-or-pay contracts. Thus, traffic moving to the pipeline will not be subject to rail competition, and traffic remaining with the railroads will not be subject to pipeline competition.

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[5] National Economic Research Associates, Inc., "Pipeline Transportation of Coal to Georgia and Florida: An Assessment of Its Energy and Economic Benefits in the Light of National Policy," Feb. 1980.

[6] Federal Reserve Bulletin, September 1980.

Another fact this argument overlooks is that where a railroad lacks competition, its rates remain subject to regulation under the Staggers Act. Continued regulation is the surrogate for competition. Slurry pipelines are not needed for that purpose.

Pipeline Disadvantages

While there are no public policy justifications for federal promotion of coal slurry pipelines, there are even stronger public policy reasons to deny federal eminent domain power to pipeline builders. For example, pipeline water use is massive. A pipeline moving 55 million tons of coal per year would require more than 13 billion gallons of water—equal to the entire flow of the Potomac for a week.[7]

The ETSI pipeline seeks to take from South Dakota—in a contract already signed by the Governor of South Dakota—50,000 acre feet of Missouri River water annually. The downriver states of Iowa, Nebraska and Missouri believe that such a diversion will result in severe water shortages in their states, and have already filed suit against South Dakota in federal court to block the agreement.

S. 1844 offers no adequate protection for water rights. On July 2, 1982, the U.S. Supreme Court decided *Sporhase* v. *Nebraska*, 50 U.S.L.W. 5115, one of the most important water law cases in many years.

The Court first decided that water is an article of commerce which is subject to federal regulation through the Congress. The Court then examined the Nebraska water control statute and concluded that, because it prohibited transportation of Nebraska water to any state which did not permit its water to be transported to Nebraska, the statute imposd an impermissible burden on interstate commerce in violation of the U.S. Constitution.

The Sporhase decision seriously calls into question the ability of the states, particularly midwestern and western states, to effectively control their water resources. Potentially, all state attempts to limit water diversion will be subject to federal court review on Constitutional grounds. More importantly, however, central to the entire legal network by which the midwestern and western states have controlled water use, including interstate compacts and equitable apportionment, has been the assumption that a state may reserve for the beneficial use of its citizens the waters which have been apportioned to it. Sporhase threatens that basic assumption.

S. 1844 does not adequately address the effects of the Sporhase decision, namely, the inability of the states to control their water resourcses. In defense of its water law, Nebraska had argued to the Court that some 37 federal statutes, containing provisions similar to those contained in S. 1844, demonstrated Congress' intent to defer to state water laws. The Court responded that Congress had deferred only to valid state laws which are subject to "the negative implications of the Commerce Clause."

The Midwest Governors Conference recently unanimously passed a resolution calling on Congress to leave the region's water resources under control of the states. Said Iowa Governor Robert Ray: "Other concerned states should have a voice when water that would normally flow to us is diverted for projects that do not benefit us and are located outside our area."

Meanwhile, the U.S. Army Corps of Engineers has concluded that even a "relatively small" diversion of water—such as an amount sought by Montana from Lake Superior for a Montana slurry pipeline—"would lower water levels enough throughout the interlocking system (of the Great Lakes) to cause the loss of $35 million in navigation revenue and $80 million in electrical generating ability." [8]

It is apparent that under existing law states can sell water to which they have access to a pipeline promoter to the detriment of farmers, ranchers, navigation interests and other water users in adjacent states—and the affected states have no adequate recourse.

The Office of Technology Assessment makes it clear that slurry pipeline water use threatens agriculture and could foreclose future development of some regions. Recent water shortages in this nation point up all too well the danger of unnecessarily reducing water tables and diverting the natural flow of rivers and streams.

The OTA study noted that in each of the pipeline origin areas it studied except one, the demand projected for water from 1985 to 2000 exceeded supply. The study stated that "a coal slurry pipeline use surface water only at the expense of growth in the existing and new uses." [9] The major competing uses would be agriculture and energy-related industry.

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[7] 1 ton of water equals 240 gallons, thus 55,000,000 tons equals 13,000,000.000 gallons.

[8] Statement of Benj. DeCook, U.S. Army Corps of Engineers.

[9] Office of Technology Assessment, "Coal Slurry Pipelines," March 1978, p. 70.

Given the importance of agriculture and energy-related industries, any project hindering production in those areas should be carefully scrutinized. Since water supplies vary tremendously from one region to another in terms of quantity and quality, it would be wise and appropriate for states to determine the uses to which their water supplies should be put.

In addition, the bill does not even address the problems faced by states sharing an aquifer or drawing water from the same stream. If one state sharing an aquifer with another should choose to let a pipeline draw water from the aquifer, the other state would be powerless under this bill to prevent the loss of its share of the aquifer. This is the problem faced by states downriver from South Dakota, and Great Lakes states dependent upon Lake Superior and interlocking lakes' water.

If this bill passes without the insertion of adequate protections, the ability of states to look after the welfare of their citizens will be seriously impaired.

PROBLEMS FOR SMALL MINE OPERATORS

It is also questionable public policy to promote a form of transportation which will serve only large producers of coal.

Slurry pipeline promoters acknowledge that the very technology of slurry pipelines requires a continuous feeding of the slurried-coal mixture into the pipeline. This limits pipeline services to mines which offer a minimum of 100 million tons of proven reserves. Thus, slurry pipelines will be built only to serve "large" coal mines. Smaller mines may well close down as a result. At the least, they will certainly be at a competitive disadvantage, as I explained earlier in this testimony.

Take, for example, the situation in the coal mining areas served by the Norfolk and Western Railway, a major transporter of Applachian coal. While the N&W serves 200 mines, only five have reserves of about 4 million tons. The typical N&W mine has reserves of about 4 million tons. Even if the main pipeline could be branched to serve more than one mine, pipeline economics dictate that the number of branches would have to be very few. Thus, only relatively high-capacity mines would be served by a slurry pipeline. This is why I commented earlier that many small mines would have to close—they would be non-competitive with the larger mines being served by the pipeline, and they couldn't afford the higher rail rates made necessary by the railroads' loss of volume business.

UNEMPLOYMENT PROBLEMS

Federal promotion of coal slurry pipelines is also at cross purposes with public policy designed to alleviate unemployment, which is now running at some 10 percent of our workforce.

Coal slurry pipeline advocates continually emphasize that slurry pipelines mean "jobs." They do—fewer stable jobs following a temporary flurry of construction activity.

During the initial construction phases, many temporary jobs will be created for transients. These jobs will require building trades skills which will continually move along the route of the pipeline. Those temporary workers will receive high wages, but they will add little to the tax bases of localities thorough which pipelines move, while demanding numerous local services. Further, the transient workers will return most of their wages to their families in other regions of the country.

As slurry pipeline interests admit—in fact, boast—once the pipelines are in place, their labor requirements will be minimal. Thus, boom towns will flourish—than quickly die.

In contrast, estimates developed by the Office of Technology Assessment imply that construction of the now proposed 13 coal slurry pipelines will eliminate as many as 41,000 railroad operating jobs [10]—plus an unspecified number of railroad-related jobs.

Currently, unemployment in the railroad industry is running at about 10 percent. Meanwhile, in the railraod supply industry, according to the Railway Progress Institute, employment levels are down some 50 percent. As I mentioned earlier, coal accounts for more than one-third of the railroads' business. As this business is lost, more railroad jobs will be lost, as will additional jobs in the railway supply industry. And, those jobs, as I explained, will not be shifted to coal slurry pipelines.

Also lost would be barge-operating and barge-related jobs as well as mine-operating and related jobs. And, as you know, as such primary jobs are lost, there are secondary effects as the loss of disposable income results in fewer service jobs in the communities affected by unemployment.

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[10] Office of Technology Assessment, "Coal Slurry Pipelines," March 1978, pgs. 77–78. The report determined railroad employment losses of 16,000 based upon 5 proposed pipelines. Applying that formula to the 13 now proposed, the result is 41,000 lost railroad jobs.

All of these kinds of jobs are now held by highly skilled workers who pay local taxes to support their communities. The same OTA study that predicts the massive unemployment suggests that stable jobs created by the new pipelines would number no more than 500 per pipeline. Thus, for every new coal slurry pipeline job created, at least six other jobs will be lost.

Unequal Regulation

It is illuminating to compare the common carrier obligations of railroads with those that would be imposed on pipelines. The staggers Act, enacted in 1980, gives the railroads contract authority, but a shipper can challenge a proposed contract between a railroad and another shipper if the contract "unduly impairs the ability of the contracting carrier or carriers to meet their common carrier obligations to the complainant." [11]

For agricultural commodities, the number of cars a carrier can commit to contract service is limited to ensure that contracts will not impair a carrier's ability to meet its common carrier obligation.

The Interstate Commerce Commission is authorized to "limit the right of a rail carrier to enter into future contracts . . . (if) additional contracts would impair the ability of the rail carrier to fulfill its common carrier obligations," [12] and the ICC continues to have jurisdiction to review railroad rates.

In contrast, S. 1844 imposes only the most ephemeral service obligations upon slurry pipeline operators. Any pipeline carrier can elect to provide coal transportation entirely under contracts. (In light of the pipeline promoters express intent to have contracts for the entire pipeline capacity prior to construction, this election seems assured.)

Moreover, once the pipeline carrier elects to provide transportation under contract, his obligations, in the first instance, extend only to the original supporters of his certificate application. There is not any requirement that a pipeline operator give all shippers an equal chance to use the pipeline, and the bill imposes no obligation on a pipeline to pro-rate capacity if new shippers want to use pipeline transportation.

Finally, let us compare the grant of eminent domain powers. The railroads do not have any federally conferred right. If a common carrier railroad needs eminent domain authority, the carrier obtains it from the states and complies with relevant state laws. Only during the 1860's were federal statutes passed which granted certain railroads the power of eminent domain, and these were necessary because the railroads were crossing federal territories in which state powers were not available. As President Reagan has noted, ". . . the extension of federal powers of eminent domain should not be undertaken lightly." [13]

Proposed coal slurry legislation, the Reagan Administration has stated, gives to "federal officials a decision that can and should be made by officials at the state level." [14]

Technological Impediments

It should also be recognized that long-term pipeline contracts would "lock" utilities into a static technology—forcing them to forego advantages that might be gained from improvements in transportation technology or in power generation.

Slurry pipeline interests make it clear that they will not begin pipeline construction until the full capacity of their lines is under contract—under contract for 25 to 30 years or the full economic life of the pipelines.

As a result: Utilities will be without incentive to find less expensive forms of transportation; Utilities will be without incentive to develop alternative forms of energy generation. For 25 to 30 years, utilities will be locked into a single source of energy (pulverized coal) for generating purposes; at a single destination to be served from a single source; and, for 25 to 30 years, utilities will be locked into a single source of transportation for that coal, coal slurry pipelines. All incentives for technological development will be lost.

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[11] 49 U.S.C. 10713(d)(2)(A)(i).

[12] 49 U.S.C. 10713(f).

[13] Memorandum from President Reagan to the Secretary of the Interior, dated, Nov. 16, 1981.

[14] Secretary of the Interior's statement before the House Committee on Interior and Insular Affairs, November 17, 1981, p. 3.

Opposition Not Limited to Railroads

I would like to note, at this point, that the controversy has for years been portrayed as one of "railroads versus pipelines." Many public statements of pipeline advocates have, for example, cited railroad opposition as the prinicple reason they need eminent domain powers.

While it is certainly true that some railroads have been less than eager to grant easements across rail lines to companies seeking to drain away their best traffic, it has never been true that railroads have been the main impediment to pipeline development, absent eminent domain.

In this connection, I was glad to see this confirmed by pipeline interests themselves. In a four-page memorandum dated February 23, 1982, the Alliance for Coal and Competitive Transportation rejected a proposal that coal pipelines be given Federal eminent domain powers limited to railroad rights-of-way, stating that such legislation "addresses only a small portion of a coal pipeline's current obstacles."

It is clear from this memo that the real objective of pipeline advocates is to obtain land over the objections of the owners at prices far lower than would otherwise be the case. In addition, they seek to avoid the kinds of reasonable conditions that states normally impose to protect their citizens.

Congress, after all, represents the public, not private interests. So it seems to me that the pipeline promoters are saying to the Congress that their private interests should be placed ahead of the interests of a rather large portion of the public—that they need eminent domain, not to serve the public interest, but to frustrate the public will.

If pipeline services were desperately needed in this nation, that proposition might have some merit—but we have seen that this is not the case.

To place this controversy in perspective, let me recall for the Committee two statements made in the 1978 report of the Office of Technology Assessment, which studied this issue at the behest of the Congress.

First, from page 16 of the report: "If pipeline economics do result in savings, the benefit will accrue to the coal mining, electric utility and pipeline industries."

Then, from the same page, a few sentences later: "Pipeline financing requires long-term purchase contracts with consumers which embody significant risk, given the difficulty in forecasting the future." And, ". . . the cost of errors in judgment will probably be borne largely by the public and not necessarily the utility investors . . ."

Economists say that a prime question in a controversy of this sort is: Who wins and who loses?

The above-quoted portions of the OTA report provide a succinct answer. The interests seeking this legislation—coal mining, electric utility and the pipeline [15] can win—but are unlikely to lose under any scenario.

The public—the consumer of electric power—can lose—but is unlikely to win under any scenario.

I would suggest that the Congress is not in the business of providing "can't lose" situations for private industries and "can't win" situations for the American public.

Summary

Before I close, I would like to recap the facts I have attempted to present with regard to this legislation.

Coal slurry pipelines offer nothing railroads cannot already supply if we are willing to foresake the concept of common carriage.

Coal slurry pipelines are not needed to move projected volumes of coal.

Coal slurry pipelines offer no provable benefits to the public.

Coal slurry pipelines could cripple an essential existing industry.

Coal slurry pipelines would consume vast quantities of scarce water.

Coal slurry pipelines could obtain that water to the detriment of states downriver from states which sell such water to pipelines, or to the detriment of states adjacent to acquifers from which the pipelines obtain water. This is because the legislation offers no safeguards to state from loss of scarce water. This fact was highlighted by the recent Supreme Court decision in Sporhase v. Nebraska.

Coal slurry pipelines would require huge amounts of private capital from already strained markets, sending interest rates still higher.

Coal slurry pipelines could foreclose technological improvement for some of the largest utilities and their customers.

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[15] Since no true pipeline industry exists, it is really the construction industry which joins coal mining and electric utility interests in supporting this legislation.

Coal slurry pipelines could trigger increases in the transportation costs of a wide-range of commodities, resulting in higher prices to consumers.

Coal slurry pipelines would cause the loss of thousands of jobs in railroading, railroad supply firms and other industries.

Coal slurry pipelines would operate under different—and more favorable—transportation rules.

Coal slurry pipelines are opposed by significant portions of the public at large.

In conclusion, I would like to call attention to a fact which may have become obscured in the controversy. There is no federal law against the construction and operation of coal slurry pipelines. The railroads are not seeking to outlaw coal slurry pipelines.

One pipeline is currently in operation and—except for the water controversy—there is no bar to the construction of the ETSI pipeline.

As ETSI demonstrates, federal eminent domain powers are not essential to the acquisition of coal pipeline rights-of-way. If this Congress denies such powers to pipeline promoters, it is likely that some pipelines will, nevertheless, be built—if they are economically justified.

Therefore, the choice for the Congress is not: Eminent domain or no pipelines.

Rather, the choice is whether or not to promote and enhance the development of this mode through government intervention. The railroads can do little to prevent construction of a pipeline built without eminent domain powers. The railroads would not fear competition from a pipeline built with no special help and which operates under the same rules as railroads.

We do, however, urge very strongly that the Congress decline to place the imprimatur of the federal government upon a redundant mode of transportation that offers little in the way of public benefit and much in the way of harm.

APPENDIX I

[From the Washington Post, Sept. 2, 1982]

NATURAL GAS SURPLUS LEADS TO 20 PERCENT PRICE RISE

(By Howie Kurtz)

Washington-area consumers will be paying 20 to 25 percent more for natural gas over the next six months because the major pipeline company that supplies the area has a huge surplus of expensive gas and has shut down 20,000 small wells in Appalachia that were selling fuel for one-third the price.

While large amounts of inexpensive gas are being burned off or vented into the air in places such as Ohio, officials at Washington Gas Light Co. say the average homeowner's bill here will jump from $800 to $976 a year.

This $354-million price increase took effect yesterday over the objections of Washington Gas officials, who called it "unjust and unreasonable." Baltimore Gas and Electric Co. is airing television commercials asking viewers not to blame the company for the increases. Although these and other utilities complained to the Federal Energy Regulatory Commission, the agency failed to block the increases.

Thousands of owners of small gas wells in Ohio and other Appalachian states are willing to sell their natural gas reserves for $2.50 to $3 a unit, one of the cheapest prices in the country. Utilities throughout the northeast, including Washington Gas, are anxious to buy that cheaper gas to supply more than 4 million customers in seven states.

But Columbia Gas Transmission Corp., whose piplines carry fuel throughout the northeast, has refused to transport the gas.

Columbia has shut down 7,000 small gas wells in Ohio alone, from June to November, because it is stuck with a massive surplus of the more expensive natural gas.

Nowhere is the impact more dramatic than in Spencer, Ohio, a small farming community southwest of Cleveland. Fred Brown, one of many farmers there with sizable amounts of gas beneath his property, has been blowing it into the air from a large storage tank behind his farmhouse.

"We've blown enough gas in this neighborhood to heat several towns," Brown said from beneath a green farmer's cap. "It's a hell of a waste. Some of the experts say we have a shortage, and here Columbia is forcing us to waste it."

Many of the gas wells in Spencer have been sitting idle for months. Some landowners, such as Brown, are venting their gas so they can produce the oil buried in the same underground deposits.

Brown says the company that leases his well vented $51,000 worth of gas in just five weeks after finding that it couldn't extract any oil without tapping the gas as well. The oil can be trucked away, but the large volumes of gas can only be pumped into a pipeline, and Columbia controls all the pipelines in the area.

At the same time, Columbia has been locked into several long-term contracts to buy large amounts of natural gas from Louisiana and Texas for as much as $8 to $9 per thousand cubic feet. These contracts have iron-clad guarantees that require the company to pay for 90 to 95 percent of the gas, whether it is used or not. In addition, about 8 percent of the southwestern gas comes from Columbia's own subsidiaries.

In 1978, after Congress voted to begin deregulating the price of natural gas, the company plunged into a bidding war for new supplies. Columbia officials say they were worried about a repeat of the gas shortage of 1976 and 1977, when schools and factories had to shut down for lack of fuel.

"Given that set of circumstances, we had to go out and contract for those gas supplies," said Ben Polis, a Columbia Gas spokesman. "You can always judge us on 20-20 hindsight, which is the best kind of vision there is."

The company's expensive new contracts in the southwest were for so-called "deep" gas more than 15,000 feet below ground, whose price is no longer regulated. But the nation was soon hit by a recession and it turned out that Columbia had overestimated the demand for gas.

"The current recession has drastically cut industrial gas use," Polis said. "We are left with a surplus. We are trying to manage it the best way we can."

Still, Columbia is bound by the strict "take or pay" provisions in its new southwestern contracts. But while Fred Brown's gas is just $2.41 a thousand cubic feet, Columbia's contracts with small wells such as Brown's either have no such guarantees or require the firm to pay for only 65 to 75 percent of the gas.

Polis said the firm also is trying to reduce the gas it uses from large southwestern gas fields and that this is only a small portion of its total supply. But the General Accounting Office found that Columbia paid among the highest prices for gas of six major pipelines surveyed and that this more expensive gas accounted for 26 percent of Columbia's gas costs in the second half of last year.

Several critics say Columbia took a big gamble by committing itself to the higher-priced gas and that small producers and consumers are now being asked to pay for that management mistake.

"Columbia hasn't let my well run since June," said Suzanne Giar, who once received $3,000 a month in royalties for a 2,500-foot well that now sits silent in the tall weeds. "But what makes me most disgusted is that they're bringing in the higher-priced gas from other states and charging the consumer more."

Mike Syring, a small independent producer who operates 160 wells in Ohio, including Giar's, said he is venting about 400,000 cubic feet of gas a day from 12 of the wells he runs in Spencer.

"It's an unadulterated sin to waste this gas," the burly oilman said. "It makes me sick. I'd give it away to the orphanages if they could transport it."

Syring said he may be forced to lay off a third of his 26-person staff while his firm, Leslie Oil and Gas, prepares a class-action lawsuit against Columbia. "There's more companies going broke out here than I've ever seen in 14 years in the business," he said. "They can stick it to us because we're small and can't make a big fuss."

At the eastern end of the state, dozens of landowners are burning their gas, which is technically illegal under state law.

"You drive around the county and you can see the flames," said Dale Hendershot, who is flaring gas at his two oil-and-gas wells near Marietta, Ohio.

"Columbia is far and above the biggest [energy] problem in this state," said Ohio attorney general William J. Brown. "An industrial state like Ohio uses a lot of gas for glass, steel, rubber and ceramics. These companies are having to pay for high-priced gas and they can't compete. Then you begin to lose jobs."

Twelve local oil companies notified Brown's office last month that they have filed for bankruptcy, and many more, including equipment suppliers, are said to be in trouble. Columbia Gas of Ohio, meanwhile, has disconnected 60,000 people for failing to pay their bills.

Columbia allowed some Appalachian well owners to keep their wells going at half-speed for twice the shutdown period, but many say this proved impossible.

Columbia is buying much of the southwestern gas from the major oil companies. Polis acknowledged that the price increases also have boosted the value of the gas Columbia is buying from its own subsidiary, but said it was too small an amount to have an impact on Columbia's profits, which topped $195 million last year.

Polis also said that Columbia doesn't make a profit on this higher-priced gas, but merely passes along the added cost to consumers.

Despite legal challenges, the Federal Energy Regulatory Commission so far has failed to rule on several of Columbia's rate increases for higher-priced gas, which totaled nearly $1 billion over the last two years. While the increases are subject to refund if Columbia ultimately loses the case, a long line of customers are growing angry.

Washington Gas, which gets 85 percent of its gas from Columbia, along with Baltimore Gas & Electric and other utilities have filed legal petitions with FERC to block Columbia's proposed price increase.

Brian Lederer, D.C. People's Counsel, told the FERC that pipelines such as Columbia are "monopolistic" giants that "have been shielded from the anticompetitive consequences of their contracting practices."

Baltimore Gas spokesman Charles Franklin said, "Columbia bought whatever they could, whenever they could, wherever they could. Now they've got all this gas they can't sell and they're looking to pass the increases on to their customers."

Senator DANFORTH. Thank you, Mr. Dempsey.

Mr. Claytor.

Mr. CLAYTOR. Mr. Chairman, I will not repeat what Mr. Dempsey has said. And I want to say that Mr. Blanchette's presentation this morning summarizes as succinctly as anyone can the arguments which require that this proposition be defeated.

I do want to say a couple of things about our railroad and about the importance of coal and why we feel that this is not in the public interest. I think the matter of capacity has been put to rest, but for the Norfolk Southern, which as you know, sir, is a recent consolidation of the Southern Railway System with the Norfolk and Western, we have at the present time substantial excess capacity, and we have the financial resources to expand if we have to.

At the present time, we have 5,100 employees furloughed, many of them in the coal fields. We have 6,000 hopper cars standing on sidings and rusting. We have the capacity in our own shops to build 16 more cars each and every working day. We are presently building four a day and can hardly justify that. We have 500 employees furloughed in that shop.

We are ready, willing, and able to handle any increase in coal business. On the other hand, amy major diversion of traffic, coal traffic, from our system would be extremely detrimental to our employees, to the people we serve throughout our system, including the citizens of Missouri, where we would simply have to, as Bob Blanchette, explained, make up, try to make up from other rates, what we lose by the diversion of the cream of the crop to coal slurry pipelines.

But 40 percent of our revenues come from coal, and the most attractive movements, of course, are the volume movements. We are most efficient in the movement of heavy volumes of coal from one origin and one destination, the unit train concept. This is the business which is at stake here, and this is the business which we think is not in the public interest to be diverted from the rail areas to a noncommon carrier pipeline.

I think the duplication of facilities issue is very important. We have in effect in America the very finest rail system in the world. We are now toying with the possibility of taking away from the finest rail system the one commodity which has made it possible for us to continue as private enterprise: coal.

If we as a matter of public policy decide that we are going to divert to a noncommon carrier coal pipeline, the cream of the crop in coal, then the future of the American rail industry is very questionable.

The long run, we will survive as the Norfolk Southern. We are a strong carrier. We will probably be badly hurt, but there are many carriers which may be destroyed. And it is not in the public interest, in our opinion, for this to happen.

If I could add one thing, I think that Mr. Workman referred to a study by the Virginia Polytechnic Institute on the efficiency of rail versus coal pipelines. I do not think he meant to indicate that this was a study by the university. I am a member of the board of that university, and I would be shocked if that was their position. I think it was done by one of their professors. Thank you, sir.

[The statement follows:]

STATEMENT OF ROBERT B. CLAYTOR, CHAIRMAN AND CHIEF EXECUTIVE OFFICER, NORFOLK SOUTHERN CORP.

Mr. Chairman, I am Robert B. Claytor, Chairman and Chief Executive Officer of Norfolk Southern Corporation. Norfolk Southern is the parent company of Norfolk and Western Railway Company and Southern Railway Company as a result of consolidation on June 1, 1982. I believe Bill Dempsey has presented clearly and well the railroads' views on coal slurry and I will try not to repeat what he has said. My comments are brief and pertain to Norfolk Southern.

Concerns have been expressed as to the capacity of the railroad industry to handle the additional coal movements projected for the rest of this decade. I can assure you that our only problem is too little coal business, not too much. Norfolk Southern is the nation's second largest carrier of coal. At the present time we have 5,100 employees furloughed, 6,000 coal hopper cars stored, 33,000 other cars unused and almost 600 engines mothballed. Norfolk Southern's NW affiliate has carbuilding shops in Roanoke, Virginia, which are operating far below capacity with over 500 unemployed. The capacity of these shops assures that we can add to our fleet at a faster rate than new mines can become operational. The lead time for car production is substantially shorter than the lead time for mine development. We are geared to handle a lot more coal than we are handling, and we have the financial ability to equip ourselves to meet whatever increased demands for coal transportation services might arise in the future.

Railroad operations are characterized by high fixed costs. We are both labor and capital intensive. With coal representing 40 percent of our freight revenues, the loss of substantial volume coal movements would have a dramatic impact on the transportation cost to be borne by the remaining coal traffic and other commodities. Norfolk Southern is heavily committed to the transportation of coal in substantial volumes. We don't intend to get out of the business of transporting coal. We are here to stay.

Coal slurry would not offer service which we are not able to offer. It would not meet future demands which we are not able to meet. While arguably it might shift some of the burden of the fixed cost of railroad operations from the few who could avail themselves of coal slurry to the shippers who cannot use the pipeline, it would increase, not reduce, the total economic cost of our U.S. transportation systems. Plainly, it would be duplicative of existing facilities.

The 30-year "take or pay contracts" which are the standard for the slurry industry would remove the mainstay, "cream of the crop," coal traffic from competition for the life of the contracts. New fuels, substitution of cheaper grades of coal due to technological developments such as scrubbers, alternative fuel sources closer to the generating plants, minemouth generation of electricity, productivity increases in truck, rail and barge transportation would be precluded from competition.

We have seen the impact on the consumer from mistakes made by utility companies that misjudged the economic and conservation climate. Closures of nuclear plants, midstream abandonments of generator expansion and long-term purchases of high-priced coal when prices are faling have all hurt the consumer. Lending the might of the federal government to coal slurry to override state statutes for condemnation of property is too great an encouragement of a doubtful venture. We hope that your committee will assert itself in support of maintaining a strong national transportation system which serves all customers, large and small, and oppose extension of the right to take property for slurry pipelines.

I appreciate the opportunity you have accorded to me to participate in this coal slurry hearing. I am especially pleased, Mr. Chairman, because we are corporate constituents of yours and very proud of our long association with the State of Missouri. Norfolk Southern's railroads employ 1,965 residents of Missouri, operate 687 miles of track in the state, pay annual taxes of $2,150,000 and purchased $33,750,000 of goods and services in Missouri last year. Kansas City is our gateway to the West. With our newly formed Norfolk Southern system, we foresee increased reliance on the St. Louis-Kansas City corridor which will both improve our transportation efficiency and benefit the Missouri economy.

Senator **Danforth**. Thank you, Mr. Claytor.

Mr. Grayson.

Mr. **Grayson**. I will try to summarize and not be too redundant, Mr. Chairman.

With respect to the common carrier issue, over the years, I think we have worked hard to develop our services so we are efficient and beneficial to both the company and its customers. While we do not generally have to accept money-losing traffic, not everything we handle is equally profitable. And that is the way it should be. Coal traffic on the Burlington Northern is profitable, but by no means our most profitable commodity. Coal constitutes a large portion of the traffic we have. It is more than half our revenue ton-miles and about 36 percent of our revenue dollars.

It is vital to our long-term health, and in my opinion, could affect our survival as a private company. Our obligation to serve as a common carrier is unconditional. Even if the customer intends to switch to another transportation company, we are required to serve them and sometimes even invest right up to the time he chooses another carrier.

I will give you just one example of what the effect would be of injecting a private carrier into the coal market. A coal slurry pipeline operating in the Powder River Basin at a rate of 30 million tons a year would immediately idle locomotives valued at a quarter of a billion in today's dollars. Those engines, the track they ran on, and the equipment purchased to move that tonnage are still the railroad's responsibility. Idle as they may be, they would represent a cost to the company. Some $400 to $500 million of revenue would suddenly cease flowing because a private carrier would grab the choice traffic.

Not so very long ago, when coal slurry eminent domain legislation was first being pushed in the Congress, many predicted the decade of the 1980's would be a period of rampant growth in coal production and consumption. A study by the highly respected National Academy of Engineers projected annual U.S. coal consumption at 1.2 billion tons by 1985, which was about double the 1975 output. This was accepted by almost everyone in the business. Our own outlook in 1975 was also one of optimism. Based upon what our utilities were telling us, we projected unit train coal tonnage to increase from 29 million tons in 1975 to 142 million tons in 1980.

I think that back then the coal picture would best be characterized by two words: great expecations. Today it is evident we all misjudged the future. The latest forecasts of the National Coal Association now estimates 1985 coal production to be 985 million tons, about 200 million less than the original one.

Our own expectations fell short. So instead of hauling 142 million tons of unit train coal in 1980, we hauled 106 million tons, which is about 25 percent less than we had anticipated. So today the two words that best describe the coal situation is idle capacity.

At last count, we in the Burlington Northern had 5,800 shipper and railroad coal cars in storage. With the demand at present, we could handle 20 to 30 million more tons of coal this year over last year.

The leadtime for constructing utility plants is 8 or 10 years. We would have more than enough time to build whatever coal-carrying capacity is required.

We at Burlington Northern have studied the feasibility of pipelines in several coal transportation situations. In every single case, we have found the problems of water supply plus high investments were sufficient to kill the project.

In conclusion, let me report there is nothing today except economics to prevent ETSI from building a pipeline. It they want to try it on the same terms and conditions under which we operate, we say, welcome to the game, but bring your money.

Senator DANFORTH. Thank you, Mr. Grayson.

Mr. Watkins.

Mr. WATKINS. Thank you, Senator. Gentlemen, I am with CSX, which a recent merger of the Chessie System and the Seaboard Coastline L&N System. We have the privilege of being the Nation's, indeed the world's, largest carrier of coal. So my comments obviously have a personal connotation as well as addressing issues of national significance.

I think, first of all, the railroads obviously have the capacity to handle the present and the projected coal traffic. I would like to certainly clear the record. One of the previous speakers talked about the inadequate rail facilities to Florida. I would like, since we handle most of the coal to Florida, I would like to categorically say that that is completely untrue, and I would challenge him to support that in any tribunal.

As a matter of fact, I think this is the kind of statement and allegations which have perhaps given us problems here. For example, his figures quoted that Florida uses 8 million tons of coal, it might go to 20, and yet the pipeline will handle and save money on 54 million.

His comments regarding the ability to serve the large and medium coal mines, I believe, are somewhat inaccurate with the economic projections. In our own case, we serve over 800 mines.

We are a true common carrier, and there is no question that if the large-volume movements are diverted to another form of transportation, we have no choice except to spread our fixed costs over a smaller number of shipments, not only in coal but in other commodities.

Senator Baucus commented on the additional impact to the grain shippers. There is no question that the shippers of all commodities in this country will be impacted if we do lose one large element of our traffic.

One other item I might just mention because in these days of deregulation and competition I think the Senate and Congress very properly have considered competition. I could think of nothing more anticompetitive than to lock up traffic without the ability to participate in future technological developments by having a 30-year contract.

We think the railroads have the capacity and the flexibility. And more importantly, if we do find improvements, we will certainly share them with our customers. Thank you, sir.

[The statement follows:]

STATEMENT OF HAYS T. WATKINS, CHAIRMAN OF THE BOARD AND CHIEF EXECUTIVE OFFICER, CSX CORP.

Mr. Chairman and members of the committee, it is a pleasure to have this opportunity to present the views of CSX Corporation concerning coal slurry pipelines. CSX is the parent company for the Chessie and Family Lines rail systems, the Nation's largest coal haulers. Thus, CSX and its over 70,000 employees have a very definite interest in what action the Congress takes regarding coal slurry pipelines.

But I want to emphasize that this issue is far from a simple pipeline versus railroad issue. Coal slurry pipelines will certainly hurt the railroads, but building them will also be contrary to the public interest. Coal slurry pipelines would cause serious environmental problems, harm many smaller coal producers, and subject countless private landowners to the drastic and costly procedures of eminent domain.

The basic question for Congress is: Why cause these problems in the first place? Do we really need another system to transport coal? The answer is no. Our railroad system has ample capacity to haul all we produce today and will produce in the future and to haul it very efficiently.

I firmly believe this Nation will increasingly turn to coal as time passes. This has happened in the last few years, and the trend will continue. We produced somewhat over 800 million tons in 1980 and reasonable estimates indicate that our Nation will produce about 1,500 million tons in 1995. As a nation, we simply can't afford to make ourselves hostage to the turmoils of the Middle East.

Studies by the U.S. Department of Transportation and other independent agencies confirm this view. Except for a very few transitional problems—the port congestion which has now been cleaned up—the railroads were able to handle the huge recent increases in coal. We are making vast investments to assure our ability to handle coal and all foreseeable growth in coal. The CSX railroads have this year already spent over $128 million in capital investment.

For the task ahead, we are equipping ourselves with larger hopper cars (we can build 32 a day in our own shops), additional locomotives (we recently ordered 50 new locomotives), spending vast sums of improving our track, and assisting in new port development. We are also taking every advantage of new technology and innovation. Our increased use of unit trains has given us an ability to handle much larger volumes of coal at lower per unit costs.

Some have supported coal slurry pipelines as a way to break an alleged rail monopoly on coal. Well, the plain fact is that we don't have a monopoly. Railroads compete vigorously with each other and we compete with barges and trucks. If that is not enough, we have to be sensitive constantly to the fact that one market competes with another market. We are in direct competition with Polish coal, being dumped at subsidized prices, and South African coal. The coal business is a competitive world market. We have long experience in the business and we are not going to raise rail rates and price coal out of the market.

As a matter of fact, rail transportation rates as a percentage of the delivered price of coal have gone down in recent years, so we think we have been pricing coal transportation quite reasonably.

Would pipelines add to competition? There may be some increased competition from pipelines in the short term, although, as I said, there is plenty of competition there now. But in the long term, they will add very little and in fact are likely to be extremely anti-competitive. Pipelines are large, capital intensive ventures. Obviously, proponents of pipelines will not build them without long term contracts running 20 or 30 years. These contracts will only affect a few users. Once they are in place, the competitive impact of the pipelines is at an end. No matter what breakthrough the rails or other modes might make in terms of lower cost alternatives, the pipelines have effectively tied up the market and foreclosed all new competition.

Are pipelines more efficient than railroads in moving coal? Absolutely not! As a businessman, I appreciate the need to increase the efficiency of our operations. As an American, I believe we have to take advantage of every efficiency gain we can achieve if we are going to continue to see our standard of living increase and if we are going to prosper in the world market. But railroads are a very efficient means of moving coal and in most instances the most efficient way to do so. The two pipelines which have actually operated prove this. In Ohio, after competing against unit coal trains, the pipeline went out of business. As for the short pipeline still operating in Arizona, its rates are not lower than comparable rail rates.

The Congressional Office of Technology Assessment has looked at the question of energy efficiency. Its study reported that coal slurry pipelines would require 610 Btu to move one ton of coal one mile, against 310 Btu to move a ton one mile by rail-almost twice as much.

Another variation of this efficiency argument is that pipelines provide an inflation hedge. As the argument goes, once you build the pipeline you are protected. Obviously, the only benefit here occurs if you assume high future inflation, and there is good reason for optimism on this score. But more important, cost is not just a function of inflation. It is also a function of original cost, and the cost of building these pipelines can be enormous. Original cost estimates for the natural gas pipeline from Alaska escalated from an original $12 billion to about $40 billion. Finally, pipelines are inflexible and that can lead to higher costs. If demand slackens, railroads can run fewer cars. This is not the case with a pipeline. Its capacity would be basically fixed.

There are other problems with using coal slurry pipelines. The most important issues here are the adverse environmental effects and the impact upon scarce water supplies. To move additional coal by railroad, we have little additional environmental impact. Our system is in place. But to move coal by pipeline, you must construct and operate pipelines, and that will have significant impact upon wilderness areas, wetlands, and the many streams that will have to be crossed. A pipeline is not all underground as some would have us believe. The most important question is whether we can afford to waste all the water required. Once that water is used in the pipeline, it's gone. There are no plans to recycle the water back to its origin. That would take another pipeline, by the way, which would nearly double the basic costs. And the water problems are not just in the West. We are beginning to face a severe water problem in our highly populated States. I do not pretend to be an expert in this area, but I simply ask that all considering this proposal be keenly aware of this problem.

Another serious question is the issue of eminent domain. Obviously, eminent domain has been used in our society to further certain public projects. In fact, historically it has been used to build our railroads, although basically with State, not Federal, action. But it is a drastic procedure. Our country has a deep respect for private property, and eminent domain can often deeply disrupt long-term relationships. These are some of the reasons we try to use this approach only as a last resort and why historically the eminent domain authority for the railroads has come from the States. Only on rare occasions such as the emergency condition of a world war has any Federal eminent domain authority been granted as proposed in the current pipeline bills.

This is not a small issue. Construction of a single 1,500-mile pipeline would typically require a 100-foot wide right-of-way, plus additional acreage for holding ponds and areas where the water could be discharged in case the pipeline failed and had to be drained. For this type of effort, you could be talking of taking anywhere between 15,000 and 20,000 acreas and affecting many, many people.

One of the issues that has not been particularly well analyzed in this debate is the impact of the operation of the pipeline on the smaller coal operator. We have to realize that the pipeline will not be a common carrier. It will be a contract carrier. Its main purpose will be to serve a very few coal operators and a few end users. The economics of pipeline construction prohibit a feeder system. In addition, to finance a pipeline, you will have to enter into long-term contracts with users for almost all the capacity of the line. Very little capacity would be left for the smaller operators even if they could reach the pipeline.

What will happen to these smaller operators? Certainly, we the railroads—who are true common carriers—will continue to serve them. But if the larger users are locked into pipeline contracts, the rail overhead will have to be spread over a smaller base. Since we have to recover our costs, this almost certainly will lead to higher rates for the remaining operators and users. Coal is our biggest commodity. Diversion of substantial tonnages of coal will not only force rates up on the remaining coal, but on other commodities as well—grain, phosphates, and lumber. The promise of help to the consumer is an illusion. The only beneficiary will be the pipeline promoters.

The impact of coal slurry upon the railroads and smaller coal operators could be disastrous. Congress in passing the Staggers Act took a major step to revitalize the railroads. Deregulation is a success and has contributed greatly to the renewed vitality of the railroad industry. At the same time, national policy is taking a much closer look at the adverse impact of government subsidy. In many respects, this slurry legislation represents a step back—one which conflicts with the recent direction of national policy and is contrary to it. Contrary because it will hurt railroads—coal is our number one commodity—and contrary because it represents another Government intrusion—Federal eminent domain.

One proposed pipeline would carry 50 million tons of eastern coal to southern power companies. If successful, this effort alone could cost the CSX companies $750 million in annual revenues, and obviously jobs would be lost.

Certainly, if a pipeline is built, we would fight back. We railroaders are competitive and ultimately I think we would win the competitive battle. In doing so, I might add, we should be given the same regulatory freedom which the slurries would enjoy so that we would have a level playing field.

One of my great concerns is what happens to the uneconomic pipelines which would have been built, perhaps at a cost of billions. Large public utilities would be locked into pipelines on long-term contracts. Even if we won the fight in the market place we could lose it in Washington. If the pipelines were in danger, there would be calls for Federal assistance. And no one can be sure what the result would be. We can compete against a private competitor, but it is a very different game when your competition is subsidized. This is my ultimate fear—a government bailout of a failed competitor. Thank you for allowing me to present you with these comments.

Senator DANFORTH. Mr. Flannery.

Mr. FLANNERY. Mr. Chairman, being fifth on a panel all in favor of the same subject leaves me with not too many brilliant new comments to make. I will make two or three comments on what coal really means to the Missouri Pacific Railroad.

For instance, in 1981 the Missouri Pacific handled 32 million tons of coal. This meant about $171 million revenue, which is 9 percent of our total revenue base. So what we are talking about is really quite an important issue to the Missouri Pacific.

You heard what Mr. Blanchette had to say this morning about the investments railroads have made as related to the movement of coal. The Missouri Pacific has made a sizable investment in the last few years, particularly since 1975, and to serve five plants alone, the Missouri Pacific spent in the neighborhood of $115 million. They spent another $60 million to increase the capacity of the line to handle all types of coal. To us, this is quite a sizable investment.

Now, as far as you also heard people say that rail labor would be affected, we agree with that. In fact, our studies in this matter indicated that on the Missouri Pacific, we would lose permanently railroad labor in the neighborhood of 1,300 jobs, and of course I think we are all familiar with the spiraling effect of loss of jobs to this Nation.

In summary, based on my experience in the railroad business, I would say the proposal before us would be a total disaster for the Missouri Pacific if this bill were allowed to pass.

Thank you very much.

[The statement follows:]

STATEMENT OF ROBERT G. FLANNERY, PRESIDENT AND CHIEF EXECUTIVE OFFICER, MISSOURI PACIFIC RAILROAD CO.

Mr. Chairman, members of the subcommittee, my name is Robert G. Flannery, and I am president and chief executive officer of the Missouri Pacific Railroad Co. I am pleased to be here today to emphasize the vigorous and sincere opposition of Missouri Pacific to proposals to allow coal slurry pipelines to use the extraordinary Federal power to condemn private property. I understand that my full statement is part of the record.

Coal is the largest single commodity transported by Missouri Pacific, 31,934,000 tons systemwide in 1981, approximately 9 percent of total system revenues. Physical plant and equipment investments necessary to enable Missouri Pacific to move increasing volumes of coal totaled over $115 million during the period 1975 thru 1982 to serve five major coal receivers. An additional $57 million was invested in the major coal hauling routes of the Missouri Pacific to increase capacity of the system.

The loss of Missouri Pacific coal traffic to slurry pipelines would be catastrophic. The loss of five of our major annual movements of coal would siphon off from Missouri Pacific approximately $156 million in annual revenues. Such a loss of revenue would mean higher transportation costs for the other coal shipments on Missouri Pacific and also higher costs for other commodities.

The great majority of electric utility plants cannot be served by a slurry pipeline and the railroads, barges, and trucks will have to continue to serve those utilities and the industrial users. The diversion of large volumes of coal movements from railroad to coal slurry pipelines cannot help but increase coal transportation costs for those utilities not served by the pipeline and also for industrial users who will continue to be served by rail.

Slurry pipelines do not promote competition. Coal is committed to a particular pipeline by long term take-or-pay contract made long before the pipeline is built. There can be no competition for that coal once the shipper by contract commits the coal to a pipeline, but the shipper will force the common carrier railroad to continue to carry the coal until the slurry pipeline is constructed, even if that be years later.

Through-put or take-or-pay contracts provide that the transportation costs to be paid by the shipper will be based upon the actual construction cost no matter what that turns out to be as compared to the estimated cost plus a fixed guaranteed rate of return on investment. Slurry proponents have always vigorously opposed cost control provisions and provisions guaranteeing to the public that the cost of transporting by pipeline will be less that transporting by rail.

Coal slurry pipelines will be in effect private carriers. There is no evidence that they will benefit the public. The extraordinary Federal power to condemn private property should not be granted to private carriers or granted for a purpose which will not benefit the public.

I appreciate the opportunity to participate in this panel before your subcommittee today.

Senator DANFORTH. Gentlemen, I think you have pretty well covered everything I can think to ask you. I want to just make three assertions and make sure that it is your view that they are correct.

First, you operate common carriers. A coal slurry pipeline would not be a common carrier. It would be a contract carrier. What is at stake in this bill is whether or not the Federal Government should grant the extraordinary power of Federal eminent domain to a contract carrier which would then compete for very important business with common carriers.

Is that a correct statement?

Mr. DEMPSEY. You phrased it very well, sir.

Senator DANFORTH. Is that a correct statement?

Mr. DEMPSEY. Yes, it is.

Senator DANFORTH. Second. it has been said that the cost of transporting coal has gone up markedly since the enactment of the Staggers Act. It is my understanding that the cost of transporting coal as a percentage of the delivered price of coal to the utilities has been actually going down during the last decade. Is that correct?

Mr. DEMPSEY. During the last decade it has dropped from 34 percent to 30 percent. Let me add by way of caution here in case there is further testimony on this, that anybody can pick out a 2- or 3-year period in the last decade and find that the railway has gone up faster than coal prices, or in the initial 1972 oil crisis time period, the coal prices went through the roof and the rail prices were flat.

But taken as a decade, those are the relationships, 30 percent to 34 percent. And as I indicated, post-Staggers, the rate increases have been less than they were pre-Staggers.

Senator **Danforth**. Third, this country is going to be more dependent on coal as a source of energy in the future than it has been in the past. Is there any doubt in your minds that the railroads can handle that increased load?

Mr. **Dempsey**. These are the operating people. I am sure there isn't. As I say, it is not necessary to rely upon interested parties in this particular instance, Mr. Chairman. You can look at all of the studies that have been made by the Office of Technology Assessment, the Department of Transportation, and the Bureau of Mines. Each of them came to the same conclusion.

Mr. **Grayson**. I might add that in our own case, Senator, we have the plant capacity in place today. We have idle locomotives and freight cars to increase our volume out of the Powder River Basin. Every single pound of it goes to the utilities in this country with almost no new capital expenditures. We have already made those expenditures.

Mr. **Dempsey**. The problem for the industry has been excess capacity, not an inability to meet demand. It is inadequate demand for the capacity we have, so that a surge in coal production would not be a problem for the industry; it would be the answer to the problem.

Senator **Danforth**. The only other question I have, and I am not sure whether you can answer. It is said that a contract between a pipeline company and a utility would be a take or pay contract, or as was said by Mr. Workman, a ship or pay contract, whichever, and that it would be a long-term arrangement.

Do you have any estimate as to how long those contracts would tend to run?

Mr. **Dempsey**. As Mr. Workman defers to the railroad experts on our business, I think we would have to defer to him. We have been told that we would be looking at contracts in the range of 20 to 25 years as a typical instance, but I simply am not in a position to verify that one way or the other. Whether my associates are or not, I don't know.

Mr. **Grayson**. We have heard everything up to 30 years. As far as some of the pipelines contemplated out of the Powder River Basin, we have nothing but speculation and rumor. We have no idea.

Mr. **Dempsey**. An interesting observation, I think, on that kind of contract I would make too by way of pointing to the kind of problems that these contracts may entail. There was, as I expect you know, a coal slurry pipeline in operation in Ohio some years back. The railroads then put in unit trains, which were an innovation, and the pipeline then went out of business. If the utility had been locked into a 25-year contract, they would still be carrying coal in that pipeline at substantially higher rates than the railroads.

Or if you observed in the Washington Post a couple of years ago, we have an anomaly in this area where cheap national gas simply cannot be pumped through the Columbia Gas System, because the

Columbia Gas System is hooked into what they regarded at the time as a good long-term contract. It is a terrible contract now, and as a consequence, consumers are paying something on the order of 20 percent higher rates for gas than they otherwise would.

Senator **Danforth**. Senator Pressler.

Senator **Pressler**. The Staggers Act basically deregulated the rail industry, and one justification for this legislation was the effort to encourage competition. Section 101 of this act said it is the policy of the U.S. Government to allow to the maximum extent possible competition, and the demand for services to establish reasonable rates for transportation by rail.

Now that railroads have benefited from rate regulation and the relaxation of other regulatory controls, the industry appears to be fighting competition from other transportation modes. The railroads don't appear to want competition from trucking, barges, and now from pipelines. How do you explain this position?

Mr. **Dempsey**. Senator, our objection is not to competition. It isn't, certainly, to competition with the motor carriers or barges. Our complaints there have been they have been heavily subsidized so it is unfair competition, and in this case it would be unfair for a different reason, because they could not be common carriers.

There is an alternative available to the Congress but I am sure they wouldn't take it, and that is to relieve the railroads of their common carrier requirements so that if we wanted a branch line out, it is out; if we wanted a line of business out, it was out. In Staggers we are deregulated to a certain extent, but in this respect not. We were given the right to contract, but the Staggers Act specifically provides the right to contract is not to impair our common carrier obligation, and if it does, the Interstate Commerce Commission is authorized to intervene and prevent us from contracting.

That is not the kind of competition we would be facing with the coal slurry pipelines because, for reasons that are obvious, they cannot be common carriers, and we must be. That is our problem. That is at the root of the difficulties.

I might say also, in connection, I think, with a question you asked, Senator Pressler, if one looks at the projected savings to the consumer, and I think it was you who asked Mr. Workman this question, the coal slurry pipeline interests have never divulged to the Congress or anyone, so far as I know, outside of their own group their cost data or methodology, but at face value, what the National Economic Research Associates study says about the Coalstream Pipeline—and we thought this was an interesting figure—is that by 1990, householders, consumers would save some $31.3 million a year.

Now, they had to assume that all coal to Florida and Georgia would be shipped by the pipeline and not the railroads. As Mr. Workman observed, that isn't a realistic assumption under any view. But just take that. We went to the census data, divided that by the number of households involved, and what you come up with on their best figures is a savings to the consumer in 1990 of 40 cents a month.

Now, that is what this is all about. Can that possibly justify the kind of damage that is threatened to all of the interests that would be impacted by this legislation?

Senator Pressler. So, in other words, your argument is that the coal slurry pipelines would take the cream of the coal crop and leave the small coal producers, the grain haulers and other commodities and they wouldn't address transporting that, and the railroads are still obligated to help out there. On the other hand, maybe the railroads are using this argument as a way to put extra pressure on, saying, golly, if the coal slurry pipelines are built, we will double rates on grain and the other coal and so forth.

I guess I will ask you the same question. I would like your assessment, or maybe Dick Grayson's, on again the South Dakota case. If the coal slurry pipeline is built, as it appears it will be, do you have any numbers on what impact that will have on the cost of shipping grain?

Mr. Dempsey. We will provide you with national estimates. You understand they will have to be rough, but we can take the OTA data on lost net revenue, for example, and we can spread that. We can do it as Mr. Blanchette indicated. It will have to be over bulk commodities, essentially, and we will be glad to do it on a national basis.

Senator Pressler. Mr. Grayson, you are from South Dakota.

Mr. Grayson. We are rather new to South Dakota, Senator. I would like to back up just a minute into the statement that Senator Baucus made, and what I think you referred to as the tremendously high rates for grain out of the South Dakota and Montana areas. They may be a little higher than coal rates but they are substantially lower than they were a couple of years ago. I couldn't estimate what might happen to the rates from South Dakota for commodities moved out of there if there is a substantial diversion of the coal from the Powder River Basin.

We were in the unique position of having to spend the major part of our capital commitments on rehabilitation of light density lines to prepare for the heavy coal traffic. Our investment on Burlington Northern alone is more than that shown by Mr. Blanchette. We are not completed yet. We still have to spend more to complete some of our coal routes. We are slowing down that process until we can determine what effect, if any, these coal slurry pipelines may have.

We are, I suppose, the largest hauler of coal for domestic consumption in this country, about 125 million tons this year. We haul no export coal. I think our situation is completely different from those of Hays Watkins and Bob Claytor, whose companies haul coal primarily in the East and for export. Our coal rates do not reach the threshold limit allowed in the Staggers Act, which was supposed to bring us to the bare minimum requirements of revenue we need as an enterprise.

Mr. Dempsey. I would like to add one thing. I gave you some figures, but this would be of special interest, Senator, to you and the chairman. I gave you the OTA figures on lost railroad revenue, which, as you may recall, by the year 2000 would more than wipe out our existing net revenues. They were $688 million a year in lost revenues. But the interesting fact is that the vast bulk of that would be in the West; $628 million of the $688 million would be in the West.

Last year the western railroads in 1971 dollars made only $366 million, so you can see there is a differential, in fact, here, and it would be that money that would have to be made up, if it could be made up, by increases in rates of other commodities.

Let me say one other thing because it is important to the eastern railroads. When these figures were calculated by OTA, they were looking at only five proposed pipelines, and Coalstream was not one of them. So, now we face a dramatic impact in the East as well, and those figures that OPA has supplied and I have given you are far under what the true figures would be.

We are now looking at 13 proposed coal slurry pipelines, not 5.

Senator PRESSLER. Mr. Grayson, could you give a ballpark figure of what you see the situation on grain rates being?

Mr. GRAYSON. As I said earlier, I couldn't quantify anything. There is one thing we are overlooking here. There is an inference, I think, that in the West, railroads, and Burlington Northern in particular, have a monopoly for grain. That is not true. Only 2 years ago we were fighting for a market share, not market dominance. We have done some things in marketing that have brought back to us a larger share of the grain market, but there is still competition in grain, as in all of these other commodities. If we have to spread the fixed cost of our rail plant among those other commodities, without coal, we may reach the point of no return. We may simply have to leave markets. When we leave those markets, you may have a monopoly, but of a different kind. It will be one of trucks or waterways or a combination of both.

So, I couldn't give you any kind of a good answer. I have heard every conceivable number as to the amount of coal that might go out of the Powder River Basin via pipeline, which is the principal area we serve. I just couldn't quantify a number. We could give it some kind of a wild guess, but I would rather not furnish you with that.

Mr. GRAYSON. I would like to clear up one other thing referred to by Senator Baucus that related to coal we own subsidizing the Burlington Northern Railroad. That is not true. I would like to point out first that Mr. Claytor heads a holding company, Mike Flannery has a holding company, CSX is a holding company. We were the last of the railroads to form a holding company. Second, we do not market any coal on the Burlington Northern. We do not mine any coal ourselves. We are the largest owners of coal reserves in North America, but we have few, if any, minable reserves right now.

The fact is the only revenue that Burlington Northern, Inc., derives from coal we own is a small amount from royalties. We are not a miner or producer of coal ourselves.

Senator PRESSLER. My final question. There is a feeling that the need for coal will escalate rapidly through the rest of the century. Is the American rail industry capable of handling a rapid steady increase in coal transportation needed for both domestic use and import sales?

Mr. DEMPSEY. Yes; there is no question in my mind. As a matter of fact, there is one thing I might add to what we have said on this subject. During the buildup of coal during the last coal strike, we ran coal at the rate of about 20 percent above our normal tonnage. So without investing another dollar because we have a sufficient excess capacity, we could do coal 20 percent more right now than we are moving.

So, as I say, I don't think there is, and I don't think it is seriously contended. In the early days of the debate, that was a contention, and I would frankly say that if, indeed, the rail industry couldn't move the coal that would be produced, we shouldn't be proposing this legislation. It would be contrary to the public interest if those were in fact the facts, but they are not.

Senator **Pressler**. Mr. Chairman, I would like the record to be left open for Mr. Grayson and also Mr. Dempsey to submit their best estimation as to what would happen under current economic conditions if the Powder Basin coal is moved by coal slurry pipeline, how that would affect grain rates in South Dakota.

Senator **Danforth**. Gentlemen, if you could do that, we would appreciate it.

Mr. **Grayson**. I will give it a try. I cannot guarantee my results.

Senator **Pressler**. You could give me some idea. We would just like your best current numbers.

Senator **Danforth**. Thank you very much.

[The following information was subsequently received for the record:]

Burlington Northern Inc.,
St. Paul, Minn., September 28, 1982.

Hon. Larry Pressler,
U.S. Senate,
Washington, D.C.

Dear Senator Pressler: During the hearing on coal slurry pipelines, September 16, you raised two issues for further elaboration: the effect of coal slurry on South Dakota grain rates and Burlington Northern's past consideration in operating coal slurry pipelines.

You may recall from my responses at the hearing, I was most reluctant to offer an estimate of the impact of coal diversion on grain rates. My staff and I have given the question a good deal of further thought and my concern remains.

My reluctance stems from two problems: the first is the formidable task of correctly forecasting the effects of change on the domestic grain market, which is itself so changeable, let alone predicting the influence of the international market to which it is so tightly linked. Second are the limitations of our ability to analyze so precisely a relationship such as you are seeking; we simply do not have the macroeconomic modeling and forecasting tools.

Returning to my first reservation—the problem of predicting the effects of the traffic dislocation—I fear that so many assumptions and stipulations about business conditions, demand, weather, company policy and public policy would be necessary, that a grain rate increase figure would not have much meaning. In fact, the real threat may not be what the level of grain rates become, (because the market forces will have a great effect in stabilizing them) but rather on our ability to handle the traffic and maintain our investment with reasonably stable rates and increased common costs.

The Federal Railroad Administration and the Association of American Railroads, I understand, both intend to try to calculate an answer to your request. We have provided some data for FRA already and will gladly assist both organizations however we can. Mr. Blanchette and Mr. Dempsey would be able to make these estimates much more readily than we. While stressing my doubts about the value of calculations of this sort, and therefore taking no position on the outcome, I will defer to the work FRA and AAR have undertaken. I hope you will find this acceptable.

The second issue, Burlington Northern's past consideration of operating coal slurry pipeline, has been distorted in the past, and I am always happy to set the record straight. If we ever found a situation in which a slurry pipeline could move coal more efficiently than the railroad, and where water supply was not a problem, then we might consider such a project.

But the fact is, we have never found that situation. In every case we examined, the railroad has turned out to be the best way to haul coal. These findings agree with studies done time and again by independent groups: the railroad does a better, more efficient job of moving coal than a slurry pipeline could.

Finally, and I state this emphatically, we have no plans to build a coal slurry pipeline: we are not even considering the possibility.

Sincerely,

RICHARD C. GRAYSON.

ASSOCIATION OF AMERICAN RAILROADS,
Washington, D.C., October 12, 1982.

Hon. LARRY PRESSLER,
U.S. Senate,
Russell Office Building,
Washington, D.C.

DEAR SENATOR PRESSLER: At the Subcommittee hearing September 16, you expressed concern for wheat farmers as a result of negative impacts on railroads from coal slurry piplelines. More specifically, you asked what might be the effect on South Dakota wheat farmers as a result of coal slurry pipelines siphoning profitable coal traffic from the railroads.

I have asked our economists and traffic specialists for comments, and they indicate that the information and data necessary to make such a prediction is not available at our Association. I understand, however, that the Federal Railroad Administration has a significant amount of data regarding South Dakota railroad lines and traffic moving over those lines. I further understand that FRA is analyzing that data and will attempt a prediction.

Under the circumstances, I believe that FRA is in a better position than are we to respond to your question, and I am deferring to their expertise in this matter.

While we are not in a postion to predict with precision the impact on South Dakota grain rates as a result of construction of coal slurry pipelines, we are in a position to state with confidence that the impact would be adverse and would be substantial.

Coal currently accounts for 20.1 percent of the freight railroad industry's revenues and a larger share of its profits. The coal slurry pipelines that have already been proposed are designed to carry some 250 million tons of coal annually, or almost half of the coal currently being hauled by railroads. Moreover, the coal movements diverted from rail to pipeline would be the high volume movements that are, generally speaking, the most profitable.

The railroad industry is in no position to absorb the losses that this diversion would entail. The industry's rate of return for the most recent 12 months was 3.07 percent. The Interstate Commerce Commission has concluded that an adequate rate of return for the industry is 16.5 percent. The short of it is that, faced with the sort of massive hemorrhage of revenue that the pipelines would threaten, the railroads would be forced to look to compensating measures—higher rates on grain, among other commodities, and cost reduction measures such as abandonment of lines that had been supported at least in part by coal movements that pipelines had rendered unprofitable.

We appreciate your concern and interest, and I and my staff would be glad to explore these issues further with you or your staff.

Yours truly,

WILLIAM H. DEMPSEY,
President.

Senator DANFORTH. The next witness is James R. Snyder.

Mr. Snyder, please proceed.

STATEMENT OF JAMES R. SNYDER, CHAIRMAN, LEGISLATIVE COMMITTEE, RLEA, AND NATIONAL LEGISLATIVE DIRECTOR, UNITED TRANSPORTATION UNION

Mr. SNYDER. Thank you, Mr. Chairman, members of the committee, and the staff. It is my pleasure to be here on behalf of all of the railroad brotherhoods this morning.

I have on my right the legislative counsel for the Railway Labor Executives Association. At the request of the committee, I have a summarized statement which I will proceed with at this time.

I appear here today before you to express the opposition of the membership of the RLEA to legislation which seeks to extend the power of Federal eminent domain authority to privately owned coal slurry pipeline companies.

The private carriers thus advantaged by this grant of Federal eminent domain authority would direct their efforts at capturing the most profitable long-haul, high-volume coal traffic, traffic traditionally transported by the Nation's railroads. It is the conviction that the passage of such legislation at this time would not be in the public interest.

The testimony today is to the impact and ultimate effect of the construction and the maximum use of coal slurry pipelines upon the employment in railroad industry. The figures we use in this testimony are derived from the evidence heretofore adduced before the Congress by advocates and opponents of coal slurry pipelines, as well as perhaps the more objectionable conclusions of the 1978 OTA report.

The impact upon railroad industry employment caused by the existence of coal slurry pipelines must be considered from two aspects: First, the direct impact occasioned by the diversion of coal transport from trains to pipelines, resulting in fewer coal trains and, therefore, fewer on-train jobs and off-train support positions; and second, the effect of loss of revenue upon the railroads' financial health and the efforts which must be made by the railroads to bring its costs in line with its reduced income in the railroad industry.

This situation has historically resulted in severe maintenance reduction by the furloughing of maintenance-of-way and equipment employees. The 1978 OTA report, which has been extensively quoted and relied upon by opponents of coal slurry pipelines since its issuance, concluded that the five pipelines then being considered for construction would by the year 2000 result in the loss of 16,000 railroad jobs at a time when employment in the industry would be about 365,660. As of July 1982, employment was about 441,000, with some 50,000 to 60,000 on furlough.

Consequently, in the year 2000, 4.4 percent of the work force would lose their jobs because of the construction of five coal slurry pipelines. Utilizing the OTA report basis, the present plan of coal slurry pipeline advocates the construction of 13 coal slurry pipelines, which would result in a direct loss of 41,600 jobs, or 11.4 percent of the employment of the railroad industry, by the year 2000.

The payroll loss of $419 million in 5 States by the year 2000 as a result of five coal slurry pipelines would increase to a payroll loss of $1.9 billion in about 17 States if coal slurry pipelines were built.

As I will point out in a moment, the effects of loss of revenues to railroads could increase this payroll loss by an additional $1.7 billion. This loss of income would be concentrated in specific communities with obviously serious economic adverse effects to the merchants, banks, and tax bases of these communities.

I might make a point here, Mr. Chairman. We are primarily talking about railroad jobs. Job loss would be much more severe in the steel industry which constructs the rail. And I might add, all of these are done in America. And so with all of the suppliers that furnish equipment and all, handling the coal unit trains, we are talking about numerous jobs which would be lost if the 13 pipelines come into being.

In addition to the direct employment consequences of coal slurry pipelines, each affected railroad would seek to lessen net financial effects of loss of revenue by reducing its maintenance costs. Projecting these losses to 13 pipelines, the figure which is $1.789 billion in lost revenue. Immediate and extensive layoffs in all maintenance categories could be expected, for that is the historically consistent railroad method for improving the bottom line on railroad financial charts.

As repeatedly proved in past experiences with this industry, such deferred maintenance programs lead to Government takeover and taxpayer bailout or elimination of the railroads involved.

There is no method of determining with precision the number of jobs to be abolished or employees placed on the street as a result of future railroad deferred maintenance programs caused by diversion of coal traffic to coal slurry pipeline.

We do know from past experiences with such programs that thousands of employees will be without jobs. To determine the number of jobs so affected, one can divide the cost reduction necessary to equal the loss of revenue, $688 million to $1.789 billion, by an employee's average annual compensation and fringe benefits, which would be between 27,250 and 71,520 jobs, which on the basis of past experience does not seem unlikely.

Such reductions would shrink industry employment by 30.8 percent to 253,160 in the year 2000. Each of the employees so affected would also be entitled to unemployment insurance benefits. And it does not take an expert in economics or finance to know that such an effect, even if lessened by half, would utterly destroy the railroad retirement system of this country.

At this point, Mr. Chairman, I would like to insert into the record a recent actuary's report from the Railroad Retirement Board as to the impact it would have if the pipelines would become available. And it breaks down the jobs lost.

I would like to insert this in the record at this point.

[The information referred to follows:]

RAILROAD RETIREMENT BOARD,
August 30, 1982.

To: Board Member Chamberlain.
From: Chief Actuary
Subject: Effect of coal slurry on railroad retirement system.

The Railway Labor Executives Association has requested you to provide projections of the impact on the railroad retirement system of reductions in railroad employment that may occur if coal slurries are constructed on a large scale. The projections are to assume reductions of 15,000, 25,000, 35,000 and 45,000 jobs.

The adverse impact, ignoring the unemployment insurance system, is given below. Each projection assumes that all jobs are lost on October 1, 1982. The figures represent the annual reduction in net income rather than the cumulative effect on the fund. The flow of the amounts appears strange. This is because the reduction in total tax income in fiscal year 1983 is mitigated in 1984 and later years by increased financial interchange transfers.

[Adverse impact (millions of dollars)]

	Number of jobs lost			
	15,000	25,000	35,000	45,000
Fiscal year:				
1982-83	$105	$175	$245	$315
Fiscal year:				
1982-83	105	175	245	315
1983-84	49	81	114	146
1984-85	53	89	125	160
1985-86	57	95	133	172
1986-87	60	100	140	180

A rough estimate prepared by the bureau of research indicates that the impact on the unemployment insurance system would be as follows, in millions of dollars.

Item	Number of jobs lost			
	15,000	25,000	35,000	45,000
Extra benefits in fiscal year 1982-83	$85	$142	$199	$256
Taxes lost in fiscal year 1982-83	6	10	13	17
Extra benefits in fiscal year 1983-84	37	61	85	110
Taxes lost in fiscal year 1983-84	6	10	13	17

The extra benefits would cease after fiscal year 1984; the loss in taxes would continue indefinitely. The reason for extra benefits in fiscal year 1984 is that the employees would qualify for benefits in the benefit year starting in July 1983 on the basis of their 1982 earnings.

NORMAN SOLOMON.

Mr. SNYDER. On the other side of the issue of coal slurry pipeline impact on employment is the creation of jobs like coal slurry pipeline construction, operation, and maintenance. Coal slurry pipeline construction will create a number of temporary jobs that will move along the route of each pipeline being constructed. By necessity, the workers will be transients in the communities through which they pass, with the bulk of the money being earned by them returned to their families in other parts of the country.

After construction, the report, if projected to 13 pipelines, would indicate that 6,500 permanent—and presumably nonunion, if history is a reliable guide—jobs would be created. Thus, for very new coal slurry pipeline job created, some 17.3 railroad jobs would be eliminated.

The effects of coal slurry pipelines on individual railroad employment can be even more severe. If such problems were to drive such railroads into reorganization and bankruptcy, in such case, the employees and this Congress would be faced with future Rock Island, Milwaukee Road, and Conrail situations.

Mr. Chairman, that concludes my statement. And with your permission, I would like to respond to the previous witness, Mr. Workman, on one issue, the jobs. He made a point here for the record that this would not affect railroad jobs.

It is very surprising that on the other side of the Hill, in the House of Representatives, where several amendments were offered to which this addressed itself, Mr. Workman and the pro-pipeline people very much did oppose any type of protection for the railroad workers in the event this became a reality.

On the other hand, he says it would not affect it. All you have to do is go back when the railroad industry had 1.5 million employees. Today the figure is 441,000.

Of course, we have had technological changes, automation and all of that. I am not talking about that. What I am really talking about here is the gas line pipeline, which when I came in my early career, I can recall as a conductor on the train we handled a lot of gasoline in trains, local trains, through trains and all. That does not exist. None of that exists today.

So I would say 40,000 to 60,000 jobs were lost through the gas pipelines. So there is no way that you can come up here and say that with this type of revenue taken away from the railroads that there would not be a loss of jobs. I just want to make that clarification. Thank you, Mr. Chairman.

Senator DANFORTH. Mr. Snyder, I would like to ask you just one question, and that is, what effect the coal slurry pipeline system would have on the railroad retirement program, and who, if anyone, would be hurt?

Mr. SNYDER. Thank you, Mr. Chairman. The memorandum that I referred to and requested be inserted into the record was prepared by the Railroad Retirement Board actuaries, who are experts in this area.

And just briefly, a breakdown. We have a breakdown as to the loss of jobs: between 15 and 25 up to 45 thousand. So we are talking, if the 13 pipelines become a reality, the loss, the adverse impact it would have on the Railroad Retirement Board in loss of funds, for example, if they were built right away, would be 415,000 jobs, $105 million and $315 million for 45,000. So we drop down to, say, 5 years from now, in 1986 and 1987, there are 15,000 jobs, it would be $60 million taken out of the railroad retirment fund through taxation. In 25 it would be $100 right on up to $180 million where there was 45,000 jobs.

Now, the reason that drops is because of the action of the Congress and the financial interchange there. This levels off some. The railroad retirement funds level off some in there because of the cutoff for dual benefits in years to come under the 1974 amendment. So that is the reason for some of those dropping figures.

But it would have a very serious impact. As you know, today we are having some financial difficulty in our railroad retirement fund because of the loss of jobs there.

Senator DANFORTH. Could you just spell that out a little more? I mean I understand. I do not want you to belabor the obvious. But if there were a pipeline, jobs would be lost. Therefore, what? Therefore, there would be less paid in to the railroad retirement fund? Correct?

Mr. SNYDER. Oh, definitely, definitely. These figures would reflect less going in; then benefits would have to be cut.

Senator DANFORTH. And presentday railroad employees are paying into a program for benefits going to presentday retired railroad people?

Mr. SNYDER. Joining with the carriers. This has been going on.

Senator DANFORTH. It is not like an annuity program?

Mr. **Snyder**. No.

Senator **Danforth**. It has a very rapid turnaround; is that right?

Mr. **Snyder**. Very rapid turnaround.

Senator **Danforth**. So that an increase in unemployment in the railroad industry would mean that the revenues necessary to fund presentday payouts would just not be there?

Mr. **Snyder**. That is true.

Senator **Danforth**. And therefore, what would happen?

Mr. **Snyder**. I would say, even if this became a reality, they could just about financially break the railroad retirement program.

Senator **Danforth**. And as you pointed out, this has not been a program without problems, even now.

Mr. **Snyder**. We have had them over the years, but we have been able to work them out pretty well, Mr. Chairman, and we would like to keep it that way. But any further erosion which would arise from a severe drop in jobs that we are talking about here in 40,000 to 45,000 jobs, any further erosion would definitely cause us all kinds of problems. People who have worked over the years and built up their entitlement that are even on the rolls, this could cause a serious problem.

Senator **Danforth**. The taxpayer could be left holding the bag; is that right?

Mr. **Snyder**. Yes. Widows, survivors, the taxpayer. It is quite a scenario there, and we do not want to get it in that posture.

Senator **Danforth**. Senator Pressler.

Senator **Pressler**. Mr. Chairman, I do not have further questions there.

I did want to ask one more question for the record if it could be submitted to Burlington Northern: As I understand it, the Burlington Northern has studied the feasibility of building its own coal slurry pipeline. Could you please explain that possibility in further detail?

If that could be submitted to the Burlington Northern for the record, I would appreciate it.

Senator **Danforth**. All right.

Senator **Pressler**. I think all of my questions of Mr. Snyder have been covered.

Senator **Danforth**. Thank you very much, Mr. Snyder. We appreciate your having been here.

Mr. **Snyder**. Thank you very much, Mr. Chairman. And on behalf of the railroad laborers, we want to express our sincere appreciation to you and to your staff and all of the efforts you have put into this. It is very important, and we have appreciated it very much.

[The statement follows:]

STATEMENT OF JAMES R. SNYDER, CHAIRMAN, LEGISLATIVE COMMITTEE, RAILWAY LABOR EXECUTIVES' ASSOCIATION

My name is James R. Snyder. I am Chairman of the Legislative Committee of the Railway Labor Executives' Association and the National Legislative Director of the United Transportation Union. I am accompanied by Clinton J. Miller, counsel to the Railway Labor Executives' Association. I present this statement on behalf of the Railway Labor Executives' Association in opposition to the enactment of S. 1844.

The membership of the Railway Labor Executives' Association consists of the chief executive officers of twenty standard national and international railway labor organizations. They are: American Railway & Airway Supervisors Association, Division of BRAC; American Train Dispatchers' Association; Brotherhood of Locomotive Engineers; Brotherhood of Maintenance of Way Employes; Brotherhood of Railroad Signalmen; Brotherhood Railway Carmen of the United States and Canada; Brotherhood of Railway, Airline & Steamship Clerks, Freight Handlers, Express & Station Employes; Hotel & Restaurant Employees & Bartenders' International Union; International Association of Machinists & Aerospace Workers; International Brotherhood of Boilermakers & Blacksmiths; International Brotherhood of Electrical Workers; International Brotherhood of Firemen & Oilers; International Longshoremen's Association; International Organization of Masters, Mates & Pilots; National Marine Engineers' Beneficial Association; Railroad Yardmasters of America; Sheet Metal Workers' International Association; Seafarers International Union of North America; Transport Workers Union of America; United Transportation Union.

I appear before you today to express the opposition of the membership of RLEA to legislation which seeks to extend the power of federal eminent domain authority to privately owned coal slurry pipeline companies.

The private carriers thus advantaged by this grant of federal eminent domain authority would direct their efforts at capturing the most profitable long-haul, high-volume coal traffic; traffic traditionally transported by this nation's railroads.

It is our conviction that the passage of such legislation in these times would not be in the public interest.

The RLEA has testified many times before on the subject of coal slurry pipeline legislation. S. 1844 is very similar to those earlier legislative proposals which failed of enactment. The record already made on this subject is just about the most complete record available on any piece of legislation ever presented to the Congress. The detailed, substantiated evidence supporting rejection of S. 1844 as unneeded by and, indeed harmful to, the public interest we believe to be overwhelming. However, in accordance with your notice we will limit our testimony today to the impact and ultimate effects of the construction and maximum use of coal slurry pipelines upon employment in the railroad industry.

The figures which we use in this testimony are derived from the evidence heretofore adduced before the Congress by advocates and opponents of coal slurry pipelines as well as the perhaps more objective conclusions of the 1978 OTA Report.

The impact upon railroad industry employment caused by the existence of coal slurry pipelines must be considered from two aspects: first, the direct impact occasioned by the diversion of coal transport from trains to pipelines resulting in fewer coal trains and therefore fewer on-train jobs and off-train support positions; and, second, the effect of loss of revenues upon a railroad's financial health and the efforts which must be made by the railroad to bring its costs in line with its reduced income—in the railroad industry this situation has historically resulted in severe maintenance reductions by the furloughing of maintenance of way and equipment employees.

The 1978 OTA Report which has been extensively quoted and relied upon by opponents of coal slurry pipeline since its issuance concluded that the five pipelines then being considered for construction would by the year 2000 result in the loss of some 16,000 railroad jobs at a time when employment in the industry would be about 365,660. (As of July, 1982, employment was about 441,000 with some 50 to 60,000 on furlough.) Consequently, in the year 2000 about 4.4 percent of the work force would lose their jobs because of the construction of 5 coal slurry pipelines.

Utilizing the OTA Report basis, the present plans of coal slurry pipeline advocates to construct 13 coal slurry pipelines would result in a direct loss of 41,600 jobs or 11.4 percent of employment in the railroad industry by the year 2000

A payroll loss of $419 million in five states by the year 2000 as a result of 5 coal slurry pipelines would increase to a pay roll loss of $1.09 billion in about 17 states if 13 coal slurry pipelines were built. As I will point out in a moment, the effects of loss of revenue to the railroads could increase this payroll loss by an additional $1.7 billion. This loss of income would be concentrated in specific adverse effects to the merchants, banks and tax bases of these communities.

In addition to the direct employment consequences of coal slurry pipelines, each affected railroad would seek to lessen the net financial effects of loss of revenue ($688 million in 1971 dollars according to the OTA Report) by reducing its maintenance costs. Projecting these losses to 13 pipelines the figure reaches $1.789 billion in lost revenue. Immediate and extensive layoffs in all maintenance categories could be epxected for that is the historically consistent railroad method of improving the bottom line on railroad financial charts. As repeatedly proved in past experiences with this industry such "deferred maintenance programs" lead to Government takeover and taxpayer bailout or elimination of the railroads involved.

There is no method of determining with precision the number of jobs to be abolished or employees placed "on the street" as a result of future railroad "deferred maintenance programs" caused by diversion of coal traffic to coal slurry pipeline. We do know from past experience with such "programs" that thousands of employees will be without jobs. To detemine the number of jobs so affected one can divide the cost reduction necessary to equal the loss of revenue ($688 million to $1.789 billion) by an employee's average annual compensation and fringe benefits ($25,000) and reach a figure of between 27,250 and 71,520 jobs which on the basis of past experience does not seem unlikely. Such reductions would shrink industry employemnt by 30.0 percent to 253,160 in the year 2000.

Each of the employees so affected also would be entitled to unemployment insurance payments. And it does not take an export in economics or finance to know that such an effect—even if lessened by half—would utterly destroy the railroad retirement system of this country.

On the other side of the issue of coal slurry pipeline impact on employment is the creation of jobs by coal slurry pipeline construction, operation and maintenance. Coal Slurry Pipeline construction will create a number of temporary jobs that will move along the route of each pipeline being constructed. By necessity the workers will be transients in the communities through which they pass with the bulk of the money being earned by them returned to their families in other parts of the country.

After construction, the OTA Report if projected to 13 pipelines, would indicate that some 6,500 permanent and presumably non-union (if history is a reliable guide) jobs would be created. Thus, for every new coal slurry pipeline job created some 17.3 railroad jobs would be eliminated.

The effects of individual coal slurry pipelines on individual railroad employment could be even more severe if such pipelines were to drive such railroads into reorganization and bankruptcy. In such cases, the employees and this Congress would be faced with future Rock Island, Milwaukee and Conrail situations.

While no one can predict with precision what will happen twenty years hence, we are sure that the situations described above are probable and the more successful are the coal slurry pipelines the more probable the above-described results to railroads, their employees and their communities.

The testimony and documentary evidence which have been presented to the Congress over the past four years demonstrate that coal slurry pipelines are not needed; they are environmentally unsound; they deplete already overburdened water resources; they represent a specialized, inflexible use of energy; their construction would contradict established Congressional policy of revitalizing the nation's railroads; and, would provide private carriers the combined advantages provided private and common carriers without the attendant disadvantages of either. That testimony and evidence also demonstrate that railroads can meet the increase in demand for coal transportation at rates probably lower, but at least comparable to pipeline rates; and, that railroads are at least as energy efficient, if not more energy efficient, than pipelines.

However, if pipelines are afforded federal eminent domain authority, railroads will be placed at a disadvantage that seriously will handicap their ability to compete. The only way to avoid the destructive competition which would result from private coal slurry pipeline companies' use of eminent domain authority is to recognize now that pipelines do not offer needed or improved coal transportation, while at the same time, they would undermine the financial stability and service availability of the nation's railroads. We respecfully submit that that is too high a price to pay for an alternative system of transportation that can produce no measurable improvement over what can be provided by the existing railroad system.

In closing, I would like to refer this Committee to the detailed report issued in 1978 by the Subcommittee on Transportation and Commerce of the Committee on Interstate and Foreign Commerce following extensive hearings on H.R. 1609, a bill virtually identical to S. 1844 in its basic purpose and effect. That report concluded: "Federal promotion of coal slurry pipelines in the manner contemplated in H.R. 1609 would undermine the national transportation policy and, with it, the system of common carriage."

Thank you for this opportunity to present to you the views of the RLEA on this important subject.

Senator Danforth. Thank you, sir.

The next witness is Warren Neufeld, secretary, Department of Water and Natural Resources, South Dakota.

STATEMENT OF WARREN NEUFELD, SECRETARY, DEPARTMENT OF WATER AND NATURAL RESOURCES, STATE OF SOUTH DAKOTA

Mr. Neufeld. Mr. Chairman, Senator Pressler, it is a pleasure to be here. My name is Bob Neufeld. I am secretary of the South Dakota Department of Water and Natural Resources. And I am here only to talk on the water issue with respect to the coal slurry. I apologize for not being able to make the hearing in Kansas City, Senator, but I had a prior commitment in Washington on that day, and Senator Pressler arranged to have me on the panel this morning.

I would like to point out a few things with respect to the water issue and set the record straight, especially as regards to some remarks made in Kansas City.

First of all, I want to explain that when the State of South Dakota was faced with the situation of either providing Missouri River water to ETSI or going ahead in the present situation where ETSI proposed to use ground water resources that would drastically and immediately affect the water supplies in South Dakota, we felt we could make no conceivable case under the Commerce clause analysis that the Supreme Court just recently elicited in the *Sporhase* case that would allow us to deny the provision of Missouri River water to ETSI should we get in any kind of litigation over that area.

We saw no detriment to the State of South Dakota, no detriment to any other States. And we still feel that way. In fact, on the contrary, the provision of that water provides substantial benefits to our citizens with no deteriment to anybody else.

Second, we think that it is a double standard the downstream States are applying to us. The State of Nebraska, up until 2 years ago, required no restrictions, no permits, no anything to get water out of the Missouri River. The only permit necessary to get Missouri River water in Nebraska was permission to cross the Corps of Engineers' levy along the river.

It is a curious position for them to be suing us today when until 2 years ago they were unconcerned about their own Missouri River water. As you know, the State of Nebraska is also mining its ground water resources at an alarming rate.

That is Nebraska's policy, not ours. And it is up to them; we respect their rights. But they should not expect us to forgo our uses of water, Missouri River water, in South Dakota, because of what we consider to be their own myopic mismanagement of their ground water resources that they may want to replace at some time in the future.

In addition, your own State of Missouri, Senator, as I understand it, requires no permits for the use of surface water in its State. And your delegate to the Missouri Basin States Association admitted that in the last meeting, that data to develop future projections of water use in the Missouri River in Missouri were hard to get and may not exist.

And when a State does not control its own water uses and has no restrictions on its own water uses—and ETSI is a controlled and restricted water use in the State of South Dakota, Senator—I do not think it should make up for the lack of certainty in its future projections by trying to restrict the uses of other States which face very difficult water situations.

With respect to the testimony you received Monday from Attorney General Ashcroft, it is in the record already, but I would like to read a paragraph of it. Some of it deals with a lawsuit, which as you know we have indicated our intention to get into that come hell or high water, so I will not deal with that.

But I would like to read this one paragraph.

Senator **Danforth**. Or low water.

Mr. **Neufeld**. You will find out about that in a minute.

> The report by the Senate Committee on Energy and Natural Resources 8 other coal slurry pipelines which have been proposed. Affected would be over 1,000 miles in land, the water necessary to implement these pipelines would be enormous. Three of these pipelines originate in Montana or Wyoming and are comparable in size to that proposed to originate at Gillette, Wyoming. These pipelines may wish to draw water further from the Missouri River and further depleting the water to downstream States. To pass a bill granting the tremendous power of eminent domain to coal slurry pipelines would be an endorsement by Congress of an untried and dangerous water-intensive method of transportation to private entities which have not indicated any real concern for other needs for the water.

And he goes on to elaborate in that respect.

The lawsuit filed by the States of Missouri, Nebraska, and Iowa says that, in fact, coal slurry is a use of water that ought to take precedence below navigation. During a normal navigation season, Senator, there are 9 million acre feet of water released during the season for navigation purposes.

If you take the navigation tonnage shipped during 1980 during the full 8-month navigation season, that works out to be thirty-seven one-hundredths of a ton of cargo for every acre foot of water that was released down the river. ETSI proposes to transport 1,875 tons for every acre foot of water, that is a 500,000-percent increase in the efficiency of water use.

Let me go on just for a second. If you take the 1990 projected capacity for all of the coal mines in all of the States of Montana and Wyoming, ship it out of those States by coal slurry, add to it all of the other coal slurry pipelines proposed to the United States, take all of that water out of the Missouri River, there is not a measurement device accurate enough to measure the difference in flow at Pierre, S. Dak.

I just heard Mr. Grayson of Burlington Northern use the term "900 million tons of coal for a national coal production projection," somewhere in that neighborhood. You could ship all of that coal by coal slurry pipeline, and you still could not measure the difference in flow in the Missouri River.

Senator, I think States downstream from us are making a mountain out of a molehill. Missouri uses much more water than the State of South Dakota does. We are using very little. We are trying to protect our water resources. And my opinion is that the water use issue with respect to coal slurry pipelines is the national-resource equivalent to swine flu: the cure everyone proposes is worse than the disease.

Senator **Danforth**. Tell me the origin of the agreement by South Dakota to sell Missouri River water. Was there not an original plan, a preceding plan, to take water from the underground water from Wyoming and use that for the ETSI pipeline?

Mr. **Neufeld**. That is correct. The location of the ETSI field in Wyoming was right adjacent to the South Dakota border. That water, according to the model in the environmental impact statement, that withdrawal would have reduced water levels in South Dakota wells and communities and springs that flow out of the Madison formation, the Black Hills of our State, which are a very valuable environmental resource, by somewhere in the neighborhood of 300 feet or more.

Senator **Danforth**. Who was going to provide that? That water was to be sold from what is called the Madison formation; right?

Mr. **Neufeld**. Yes, sir.

Senator **Danforth**. That is the underground water?

Mr. **Neufeld**. Yes, sir. It is a geological formation.

Senator **Danforth**. Was that going to be sold to the ETSI pipeline, or were they just going to take it up?

Mr. **Neufeld**. No, sir. That was a permit granted by the State of Wyoming under authority passed by the Wyoming Legislature in 1974.

Senator **Danforth**. So Wyoming had, by legislative act, provided authority for the ETSI pipeline to use the water from the Madison formation?

Mr. **Neufeld**. Yes, sir.

Senator **Danforth**. And what was South Dakota's position on that?

Mr. **Neufeld**. Our position was that that would provide a great deal of detriment to the State of South Dakota, that if we were to get into a situation where we had to sue Wyoming, our case probably would not be as strong as we would like it to have been.

Senator **Danforth**. So in order to——

Mr. **Neufeld**. The only solution was to provide an alternate supply.

Senator **Danforth**. So in order to solve that problem, South Dakota then by, what, an act of the legislature, agreed to sell water from the Missouri River?

Mr. **Neufeld**. That is correct. The legislature was aware of the transaction and passed legislation which did not specifically authorize it but——

Senator **Danforth**. You thought that Wyoming was about to give away your water?

Mr. **Neufeld**. No, sir.

Senator **Danforth**. You did not?

Mr. **Neufeld**. We thought Wyoming was about to inflict tremendous danger and peril upon the water supplies of South Dakota.

Senator **Danforth**. By giving away South Dakota's water?

Mr. **Neufeld**. No. Each State has the authority to regulate its water supplies within its borders, Senator. It can do that so long as it does not interfere with the legal valid rights of other States. And when that happens you can work it out in a number of ways. We felt that Wyoming was ready to do that.

We are not saying it was our water, but we are saying their use of that water in Wyoming would interfere with our use of water in South Dakota. No one can make that argument with respect to the Missouri River.

Senator DANFORTH. South Dakota's water was about to be depleted by Wyoming.

Mr. NEUFELD. Our water was going to be made unavailable by Wyoming, yes.

Senator DANFORTH. OK. Is there anything in this bill that would prevent them, Wyoming or any other State, from using underground water for the ETSI pipeline?

Mr. NEUFELD. No. ETSI from using underground water for the pipeline, for slurry pipelines?

Senator DANFORTH. Or anyone for any future pipeline going from point A to point B, is there anything in this bill to prevent that?

Mr. NEUFELD. No, sir, no.

Senator DANFORTH. Senator Pressler.

Senator PRESSLER. Well, first of all, I thank Bob Neufeld for his being here and compliment him for his testimony.

I think one thing we want to make a part of the record—I have talked about this a lot—is that South Dakota has not gotten a great deal in return for what it has given up in terms of the Missouri River development. We have given up over half a million acres of prime farmland, and we have not gotten the kind of projects that other States have.

Bob, do you have any comparisons with other States regarding the benefits received from the Pick-Sloan project? And if they are too numerous, maybe you could add them to the record.

Mr. NEUFELD. I have a copy of something in my files, and I could provide a copy to the committee that indicates the benefits. But by and large, North and South Dakota were each to receive about a million acres of irrigation, for flooding over a million acres of land. Today the joint development in both States is about 32,000 acres, if I remember correctly. The specifics will be in the copy provided the committee.

Nebraska, on the other hand, has been the beneficiary of 223,000 acres of irrigation. Under Pick-Sloan, it receives more power than South Dakota receives from the dams in South Dakota. The revenues from that power are, in turn, being used to pay for irrigation in Nebraska, and we are, frankly, quite upset about it.

Senator PRESSLER. Could you explain in greater detail the impact of the South Dakota water sale on the availability of water in the Missouri River? I think it is fascinating what you said, that it would not affect——

Mr. NEUFELD. The water use issue with respect to the amount of water in the Missouri River is a manufactured issue. According to the latest depletion estimates from the Federal Government, both the Corps of Engineers and the Bureau of Reclamation, there are about 25 million acre-feet of water that pass the city every year.

The Missouri River more than doubles that flow before it leaves its channel and enters the Mississippi in the State of Missouri. That is 55-60 million acre-feet of water. The total amount, in order to measure a change in flow at the mouth of the Missouri River under the most accurate flow measurement devices available today, you would have to withdraw 2.5 million acre-feet of water from the Missouri River to even measure the difference at Herman, Mo.

But it sounds like a lot of water, but it would have an insubstantial impact. And no one is proposing anything close to that, Senator.

If I might, I brought some charts, and I would like to show one to the committee which shows that what the State of South Dakota did was propose a unique solution to a unique problem. And it is not anything different any of the other States have done. And I would like to show it to the committee.

What the National Water Commission report that was done in 1974, I believe, in its Legal Study No. 7, says is there is no such thing as the Missouri River Basin, it is just a watershed subdivision of the Mississippi River Basin. But for the sake of discussion, we will use the Missouri River watershed as a river basin.

These pluses and minuses on the chart show places where water is being transferred in and out of basin across basin boundaries. And in each case there was a unique solution to a unique problem that happened to be provided.

Here is an irrigation project. This water would ordinarily flow into the Hudson Bay drainage in Canada. It comes across the border into Milk River in Montana which feeds the Missouri River Basin, 111,000 acre-feet in 1978. The city of Butte, Mont., in order to provide a municipal water supply, takes water across the divide to the tune of about 12,000 acre-feet in 1978.

This 7,000 acre-foot inflow in Wyoming is for irrigation. This represents the city of Denver. They get their water from across the Continental Divide, 505,000 acre-feet in 1978, almost 13,000 acre-feet for an irrigation project here.

And the city of Springfield, Mo., found it convenient—and we do not fault them for it—to take water from the Missouri River Basin and put it into, I believe, the White River Basin in 1978 for a municipal water supply. The city sits right on the divide of the basin and cannot get water from one side of town to the other without creating an interbasin diversion, almost 17,000 acre-feet in 1978.

The point is what we are doing in South Dakota is not new. It was a unique solution to a unique problem, just as all of these other things were. And what would normally be looked at askance by a lot of people in the abstract, when you deal with it in a specific factual situation, provides a very reasonable solution to a local problem.

And when Senator Danforth asked me if the bill would prevent Wyoming from taking more groundwater from the Madison, I answered no, and I think that is true. But I think, as other cases have shown, there are other unique local solutions to local problems when those come up, and this is what we have done in South Dakota.

Senator DANFORTH. What other States are in the business of selling the Missouri River?

Mr. NEUFELD. Senator Danforth, I do not know whether that makes any difference to Missouri from the standpoint that the water is gone, whether we sell it or give it away. Would you rather have us give it away and increase the demand?

Senator DANFORTH. Can you tell me what other States are in the business of selling the Missouri River?

Mr. NEUFELD. None that I know of. We were the only ones smart enough to think of it first.

Senator PRESSLER. Do you have any other charts? I have another question or two.

Mr. NEUFELD. I do have some others, but I think this is the most relevant, and I do not want to take up more of the committee's time.

Senator PRESSLER. How many acre-feet will the South Dakota version take compared to what these cities have done?

Mr. NEUFELD. How many cities?

Senator PRESSLER. No; how many diversions in acre-feet? Give us a comparison now. The ETSI pipeline will take how many acre-feet?

Mr. NEUFELD. The permit we have issued for ETSI is for 50,000 acre-feet. Their first increment of development would use 20,000. There was more to your question, Senator Pressler, but I did not catch it.

Senator PRESSLER. I have one or two more questions. I am not sure if they relate to this chart. Do you have some more charts that are relevant?

Mr. NEUFELD. Just one more, Senator. And I would like to put it up, if I might.

This is a water use chart by State, and the size of the circle represents the amount of water being used in the States. This was put together originally by the Western Governors Policy Office from USGS survey data. We went to the same source and added Iowa, Kansas, and Missouri so we could include the Missouri River Basin. The green represents irrigation use, the blue represents domestic and industrial use; and as you can see, even if we were to add the 50,000-acre-feet figure here that we have allocated, I see South Dakota's use in the basin as being minimal, and we can't see what all the screaming is about.

Senator PRESSLER. As a spokesman for the State of South Dakota, what is your opinion of S. 1844, the coal slurry eminent domain legislation? Could you please comment on the eminent domain provision as well as the State water rights provision? I suppose in this case the particular sale of South Dakota water doesn't depend upon the eminent domain legislation.

Have you taken a position on this piece of legislation?

Mr. NEUFELD. I will sit down at the microphone so I don't have to yell so much, although it is getting easier.

The State of South Dakota takes no position on the eminent domain legislation. We have been attacked and accused of a number of things as the water provisions of that legislation have been discussed, and I am here to try to set the record straight on what actually happened and what is about to take place. The provision of eminent domain is not an issue in South Dakota because ETSI, like other water rights holders in the State of South Dakota, does have the right of eminent domain under our water laws. It is a common provision in western water law that when you get a water right, you obtain the right of eminent domain for your water use.

Senator **Pressler**. This may be something you want to submit for the record, but we have heard testimony here this morning about the impact of this. The railroads are saying it will cost more to ship grain, and the coal slurry people say there is plenty of coal for both of them to haul. Maybe you haven't worked it out, but if you would like to submit your figures, I think the rest of them are doing that, and we would be glad to see them, or do you have any general comments?

Mr. **Neufeld**. My only general comment, Senator Pressler, is that those responsibilities are divided in State government. The fellow who handles rail transportation and I have an agreement. I don't play with his trains and he doesn't swim in my water. And the transportation issues are simply beyond my ken.

Senator **Pressler**. All right. Nevertheless, if you can get together, I will be sending out some of the responses we get. I have asked that question of each witness, and if you have further comments, we will leave the record open, and if you have anything subsequent you wish to submit, we will be glad to see that it gets into the record.

Mr. **Neufeld**. Thank you. Thank you, Senator Danforth.

[The following information was subsequently received for the record:]

THE 1944 FLOOD CONTROL ACT IN 1982

Sunday, May 30, 1982
Huron Daily Plainsman

Editorials

We think that when representatives of the Missouri River Basin Association states recently agreed to study the meaning of the Flood Control Act of 1944 they made a meaningful move for South Dakota.

The group, meeting in Omaha about 10 days ago, decided upon a study of the meaning of the Flood Control Act in a move to help resolve differences existing between the states on the subject of water development. We think it significant because much of the objection to South Dakota plans is coming from people who seem to never have heard of the legislation that set up the Pick-Sloan Missouri Basin plan.

The Flood Control Act of 1944 was drafted nearly four decades ago. That is a long time ago. Long enough to permit those who may have once been familiar with the provisions of the law to forget them. And long enough for those who may remember those provisions to ignore them.

As a matter of fact, it would be impossible for anyone under the age of 50 years to have had first-hand knowledge of the legislation that will be studied; or for anyone under that age to recall any of the circumstances that produced the law.

In this context, it would seem to be to the advantage of most South Dakotans to also study that law. It held a lot of promise for South Dakota. And parts of the promise are currently being ignored by individuals in other states who oppose some South Dakota plans.

To make such a local study easier, the South Dakota Water Congress has prepared an analysis of the Flood Control Act of 1944, the promises it contained and the benefits that have actually accrued to individual states during the 38 years since it was passed.

For starters, the analysis shows, only 24,100 acres of the 972,000 acres of irrigation promised South Dakota in the original act have been developed. Yet 13 congressmen, representing 6.5 million people in downstream states, are fighting the sale of a relatively small amount of water, a sale that would help to develop some of that irrigation promised so many years ago.

At the same time, those downstream states have already realized $1.5 billion in flood control benefits and have added approximately 188,000 acres of prime cropland, formerly too prone to flooding to be farmed, to production as a result of the Pick-Sloan Project.

Four of those states have received considerable direct navigation benefits and two have developed a considerable amount of irrigation as a result of the Flood Control Act of 1944 which is to be the subject of the study.

Water Congress President Jeff Nelson and Staff Director Judy Harrington have put the whole thing together in a concise, well-documented, historical analysis of the promises and the results, so far, of the Pick-Sloan Missouri Basin plan which was the product of the Flood Control Act of 1944.

The message, titled "A little history 'don't' hurt," is published on the adjacent page in the belief that the factual content is much more credible than the grammatical structure of the headline. It is worth reading and clipping for further reference by thoughtful South Dakotans who wish to be well-informed on the history of water development in the Missouri River Basin.

June 8, 1982

HOUSE
CONGRESSIONAL RECORD

Mr. ROBERTS of South Dakota. I rise in support of H.R. 4347

Recently, the South Dakota Water Congress released a report on the history of the 1944 Flood Control Act and its accomplishments to date. I am, by unanimous consent, placing this report in the RECORD for the examination of my colleagues.

Mr. Speaker, for 40 years South Dakota has been promised much in the way of assistance for water development, all in the name of compensation for our past sacrifices. H.R. 4347 will be a major step toward the realization of those commitments, and I strongly urge its passage.

Thank you, Mr. Speaker.

The report to which I referred is as follows:

A LITTLE HISTORY 'DON'T' HURT

SOUTH DAKOTA WATER CONGRESS

A little history 'don't' hurt

South Dakota Water Congress

James Watt has said he's likely the last U.S. Secretary of Interior who will have ever heard of the Pick-Sloan Plan. It is possible that some people who oppose South Dakota's water sale have never read it.

To place today's controversies concerning the Missouri River in perspective, it is important to review some of the history of the Pick-Sloan Plan that led to the major developments on the Missouri River.

Early flooding

Go back to the first recorded flood stage of 12 to 17 feet in 1844 or the severe flooding that occurred in 1881 and chronically through the 1920s. Because of these problems, Congress directed the Corps of Engineers to study ways in which these problems could be avoided. In 1927 the Corps of Engineers completed what is known as House Document 308, a 1,245-page description of methods of providing storage in the Missouri Basin to achieve flood control, irrigation, navigation and power development.

Clearly, however, the attention of the nation was not focused on water resources development in those depression days of the late 1920s and 1930s and the gathering war clouds that afflicted Europe and Japan. Like so many things, the impetus for moving forward was only partially addressed when, under the leadership of President Franklin D. Roosevelt, the construction of the Fort Peck, Mont., dam began in 1933 as a public works project.

It took severe flooding once again in the early 1940s to refocus government attention. In 1943 it is recorded that seven feet of water covered the Omaha airport. It was then that national planners perceived that this continued disruption of the heartland of America that produced an enormous amount of its goods for the welfare of its citizens and comprised one-sixth of the land mass of the United States had to be addressed, if for no other reason than it posed a threat to the war effort of World War II.

A plan of benefits

Against that backdrop, then, two plans were advanced — one by Lewis Pick, who was the Missouri River division engineer, and later became the chief of engineers, and one by a regional engineer of the Bureau of Reclamation, W. Glen Sloan — to solve the problems of the Missouri River basin. From the marriage of these two proposals was born the Flood Control Act of 1944 which was later renamed the Pick-Sloan Plan in honor of the two gentlemen who authored the major elements of it.

The authorizing document of the Pick-Sloan Plan is Senate Document 191 that was considered by Congress in April, 1944. That Senate document, along with House Document 475, identified navigation, flood control, irrigation, power production, the restoration of surface and ground water supplies, furnishing municipal water supplies, abatement of stream pollution, silt control, fish and wildlife preservation, and recreation as the key features of the 1944 Flood Control Act.

It's interesting to look at Senate Document 191 and understand the views of those persons involved at that time. According to Senate Document 191, it was to be "a plan for the conservation and control of the water reservoirs of the entire Missouri River Basin," a radical proposal for that day. It was predicated on "yield for the greatest good to the greatest number of people."

It proposed irrigation development for 5,307,700 acres of land in the Basin and 758,500 kilowatts of hydropower capacity. South Dakota's proposed share of that irrigation development was set at 972,510 acres.

Who benefitted first?

The key to the development of the Pick-Sloan Project was probably most clearly enunciated by then Chief of Engineers, Maj. Gen. E. Reybold, who, in a letter to the commissioner of Reclamation dated April 25, 1944, stated in part:

"Since reservoirs on the mainstem are the most beneficial from the standpoint of flood control below Sioux City and are vitally needed for cyclic storage, I consider the maximum practical amount of storage must be provided on the mainstem in North and South Dakota."

This, then, clearly outlined the major tradeoffs in the development of the Pick-Sloan Plan and it is important to remember that these are the same sort of issues that are still being debated today.

What were those tradeoffs?

Flood storage, irrigation

First, trade reservoir storage space by permanently flooding large areas of South Dakota, North Dakota and Montana to accommodate flood control in return for irrigation development in these upper basin states. South Dakota, for example, permanently flooded over 500,000 acres of Missouri River bottomlands in order to do their part in the development of the Pick-Sloan Plan.

Navigation not a priority

The second major tradeoff concerned the same type of upstream versus downstream fight seen today, but was centered primarily on the use of water for such things as irrigation and power production versus downstream navigation. This conflict was resolved by a key amendment to the act, known as the O'Mahoney-Milliken Amendment, which stated:

"The use for navigation, in connection with the operation and maintenance of such works herein authorized for construction of waters arising in states lying wholly or partly west of the 98th meridian shall be only such use as does not conflict with any beneficial consumptive use, present or future, in the states lying wholly or partly west of the 98th meridian, of such waters for domestic, municipal, stock water, irrigation, mining or industrial purposes."

Iowa lies wholly east of the 98th meridian. This key amendment broke the deadlock between upstream and downstream states by guaranteeing water use by those upstream states — not just a chance to look at large reservoirs.

Hydropower to be shared

The third major tradeoff or feature of the Pick-Sloan Plan was that the hydropower developed would be shared among the states of the Basin, without regard to the location of those plants which would produce that power.

Reality

What has happened as a result of this far-reaching legislation?

FLOOD CONTROL. Six mainstem reservoirs have been constructed on the Missouri (one each in Montana and North Dakota, four in South Dakota) which provide for 74.3 million acre-feet of storage. That's 24.2 trillion gallons of water. Of that amount, 58 million acre-feet are dedicated annually to flood control.

For flood control the dollar savings have been enormous. Since 1954 when the mainstem reservoirs were initially operated as integrated units, there has been cumulative savings from flood control of $1.489 billion ($450 million of that savings in 1977 alone). Compare this to the total federal investment in the Pick-Sloan Plan of about $1.15 billion. No more does Omaha or St. Louis have to contend with the killer floods that afflicted them in the '20s, '30s and '40s. Records indicate that in 1952, flood waters crested at 30 feet in Omaha. Unlike Ft. Wayne, Indiana, which in March, 1982, dominated the national news because of severe flooding, downstream states in the Missouri Basin need no longer fear for their lives or property.

IRRIGATION — Power revenues from the Pick-Sloan dams assist in the repayment of 562,800 federally-developed acres of irrigation. Of that amount, 24,100 acres are in South Dakota (in the Shadehill, Rapid Valley and Angostura projects). Recall, then, the promise that was made to South Dakota in 1944 to have over 970,000 acres of irrigation development. Thirty-eight years later, 2.5 percent of that promised amount has materialized.

What's more, the stabilizing influence of the dams on the mainstem has added approximately 188,000 acres of prime cropland along the river from Sioux City south which would never have been possible to farm with the uncertainties of potential annual flooding.

HYDROPOWER — Hydro development has far exceeded the initially proposed 758,500 kilowatts of development. Today, 2,398,000 kilowatts of installed capacity produces between 10 and 12 billion kilowatt hours of energy annually. That power is delivered over approximately 7,400 miles of federal transmission lines and 90 substations to 230 preference customers and also furnishes large blocks of power for customers of private power companies. Of the firm power, South Dakota preference customers receive 22 percent of that total. The upstream states that bore the burden of the construction on the mainstem dams, namely Montana, North and South Dakota, presently receive about 42 percent of the firm power that is marketed while Iowa, Minnesota and Nebraska receive about 58 percent of that firm power.

The "cash register" of the Pick-Sloan Plan has served the system's investors who are the taxpayers, well. Through fiscal year 1979, revenues from power users have returned $990 million to the U.S. Treasury, repaying with interest the reimbursable investments. Today, power sales raise about $100 million annually for the federal government. These revenues also pay for the operation, maintenance and replacements in the system and assist repaying investments made in Pick-Sloan irrigation projects. Water delivery for irrigation, municipal and industrial purposes produce additional revenue for the Treasury; however, the large majority of revenues is accounted for by hydropower sales.

NAVIGATION — Another major beneficiary of the construction of the

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Editorial

Downstream Missouri Basin states got the cake—and the icing too

ONE of the prime benefits to be derived by South Dakota from the four huge Missouri River dams built within our borders was to be a huge increase in productive acres through irrigation.

Ironically, studies made by the South Dakota Water Congress show that eight times as many acres have been added to productivity in the downstream states as have been brought under irrigation in South Dakota.

The stabilizing influence of the four dams in South Dakota, plus Garrison in North Dakota and Ft. Peck in Montana, has added about 188,000 acres of prime cropland below the last dam, Gavin's Point near Yankton. This is cropland that was too risky to farm during the era of floods.

This acreage compares to only 24,100 acres brought under irrigation in South Dakota.

This spinoff benefit to the downstream states is in addition to an estimated $1.5 billion in cumulative savings already realized downstream from flood control. Additionally,. downstream states have the benefit of an assured river level for barge transportation.

Water Congress officials say that a careful reading of the Flood Control Act of 1944, which authorized the dam program, and accompanying congressional committee reports at the time state plainly there was to be flood control for the downstream states, irrigation for the storage states and electricity from hydropower for as many as could share in it.

The Water Congress officials add that the six dams in Montana and the Dakotas are annually holding back 58 million acre feet of potential flood water from Iowa, Nebraska, Kansas and Missouri. This alone could make the dam project worthwhile from the downstream states' point of view. The navigation, hydropower and added farmland are frosting on the cake for them.

This is all the more reason that 13 downstream congressmen representing 6.5 million people should not be fighting South Dakota's sale of 50,000 acre-feet of water, a sale that will help finance our own water development that the federal government promised but has not delivered.

Particularly in this year of abnormally large amounts of precipitation in the Missouri River basin should the downstream states be thankful. There would be many fewer acres of cropland downstream were it not for those six huge dams spanning the river upstream.

Aberdeen American News

Aberdeen, South Dakota

June 10, 1982

mainstem dams has been navigation with the maintenance of a nine-foot-deep, 300-foot-wide channel that provides an eight-month barge season, in recent years allowing over three million tons of commodities annually to be shipped from Sioux City on south. Approximately one-third of those commodities has been farm produce.

RECREATION — Recreation on the Missouri River furnished 10 million visitor days in 1981, and wildlife has been enhanced.

With that record, then, why is there this new interest and conflict?

It dates, perhaps, from 1973 and the beginning of the oil crises, prompting major energy corporations to look at the Missouri River as a water source for future energy development. Like it or not, this region is blessed in Wyoming, North Dakota and Montana with enormous amounts of coal which in order to be used needs enormous amounts of water. The U.S. Bureau of Reclamation, in their 1977 Water for Energy study, estimated that one million acre feet could be made available for the purposes of energy development without affecting the other uses on the river.

While there has been an uproar lately about the amount of water being used for industrial purposes — the most famous of which is the sale by the state of South Dakota of 50,000 acre feet of water to Energy Transportation Systems, Inc. for a coal slurry pipeline — there is presently less than 100,000 acre feet of water that is permitted to major energy users. Compare that with the Corps of Engineers estimate of evaporation losses on the six mainstem reservoirs of one to 2.5 million acre feet annually.

*Acreage acquired by the U.S. Government for construction of the mainstem dams & reservoirs on the Missouri River. Source: Real Estate Division, Army Corps of Engineers, Omaha Division. Figures given first are Indian acres, then non-Indian, then total.

	Montana	North Dakota	South Dakota	Nebraska
Ft. Peck	13 590,084 590,097			
Garrison		152,519 310,354 462,873		
Oahe		22,498 62,689 85,187	132,654 207,746 340,400	
Sharpe			24,066 21,511 45,577	
Francis Case			21,542 93,322 114,864	
Lewis & Clark			0 19,549 19,549	593 14,569 15,162
	590,097	548,060	520,390	15,162

	Acres Lost to Reservoirs (1)	Acres Irrigation Promised (2)	Acres Irrigation Developed (3)	Firm Power Entitlement (4)	Direct Navigation Benefits	Flood Control Benefits
Montana	590,097	1,313,930	76,200	8.1 pct.	No	No
N. Dakota	584,060	1,266,440	9,000	12.2 pct.	No	No
S. Dakota	520,390	972,510	24,100	22.3 pct.	No	No
Iowa	0	0	0	14.6 pct.	Yes	Yes
Minnesota	0	0	0	24.2 pct.	No	No
Nebraska	15,162	1,009,375	222,800	18.6 pct.	Yes	Yes
Kansas	0	193,490	72,600	0	Yes	Yes
Missouri	0	0	0	0	Yes	Yes
Wyoming	0	448,960	158,100	0	No	No
Colorado	0	102,999	0	0	No	No
Total	1,673,709	5,307,704	562,800	100.0 pct.		$1,489,000,000 (5)

(1) Real Estate Division, Army Corps of Engineers, Omaha District.

(2) Senate Document 191, May 5, 1944, p. 23.

(3) Table 1, Section III, Customer Brochure, February, 1982, Western Area Power Administration.

(4) Western Area Power Administration.

(5) Corps of Engineers, Missouri River Division 1980-81 Annual Operating Plan, p. 39.

Nonetheless, it raises questions — questions which should be addressed in the context of history.

Issues that cause conflicts between upstream and downstream states in the Basin are not new. They may be created by different and changing pressures, but they are not new. In the past, the conflicts were settled by compromise, negotiation and an overall view, to quote Senate Document 191, to "yield the greatest good to the greatest number of people." It is our responsibility at the state and federal level to pursue this goal.

South Dakota must look to the Missouri River and how it can use what it believes is a fair and yet modest entitlement to foster some state development of municipal water supplies, rural water systems and state irrigation projects. These modest efforts do not in any way relieve the significant federal obligation to South Dakota as its part of the Pick-Sloan "deal."

South Dakota has benefitted from the Missouri River — but in terms of overall concept and major benefits that have occurred as a result of that development, South Dakota has come up short. So short in fact, that in some respects downstream states have benefitted more by accident than South Dakota has by design.

Senator DANFORTH. The next witness is Joe Lema, vice president, National Coal Association.

STATEMENT OF JOSEPH E. LEMA, VICE PRESIDENT, TRANSPORTATION, NATIONAL COAL ASSOCIATION

Mr. LEMA. Thank you, Mr. Chairman. It is a pleasure for the National Coal Association to be in this room again in which there were many deliberations in 1980 on railroad regulatory reform and improving the competitiveness of rail transportation across the United States.

My name is Joseph Lema. I am vice president for transportation of the National Coal Association. NCA represents coal producers, coal sellers and other organizations associated with America's coal industry.

I am appearing before you today to state the coal industry's firm support for S. 1844. We in the National Coal Association are strong believers in private sector competition, as evidenced by some 300 coal mining companies in America operating 6,500 coal mines, and 85 of those companies produce more than 1 million tons of coal a year. So the coal industry is quite competitive, and to get full use of America's coal, we believe the transportation of coal must also increase in competitiveness.

We know that for 25 years, coal pipeline construction has been stalled due to a lack of eminent domain. Congress can now correct the situation by passage of S. 1844. We believe that the bill as reported by the Senate Energy and Natural Resources Committee now should be brought to the Senate floor for consideration and passage.

The question before the Congress is simple: Should railroads which hold unmistakable market dominance over the movement of coal face competition in coal transportation furnished by coal pipelines, and should Congress facilitate such competition by removing the serious obstacle which blocks their construction, the lack of eminent domain?

We believe, first, that railroads should compete with coal pipelines so that competitive market forces, not Government regulation, will keep coal transportation rates reasonable in relationship to transportation services provided.

Second, we believe that Congress should facilitate this competition by passing S. 1844. We believe, Mr. Chairman, that this subcommittee's leadership in the passage of the Staggers Rail Act of 1980 has furnished some important groundwork in support of the notion that railroads should compete with other transport modes.

We know that in 1976 the Railroad Revitalization and Regulatory Reform Act enabled the railroads to compete much more effectively, and then in 1980 the Staggers Rail Act made railroads fully competitive, in our estimation, with other transport modes, notably coal pipelines.

The Staggers Act, which the coal industry supported and which we continue to support, removed burdensome railroad regulation, increased rail pricing flexibility, and gave rail carriers the authority to contract with shippers for specific rail traffic over an extended period of time. The railroads now are both common carriers and contract carriers; therefore, railroads presently have the ability to execute transportation contracts, which, among other things, stand to have valuable traffic such as coal diverted to other transport modes: for example, pipelines. With this in mind, NCA finds no supportable reason for the railroads to oppose coal pipeline eminent domain.

I would like to cite four fundamental reasons for supporting coal pipeline eminent domain and to urge early Senate consideration for and passage of the bill. First, competition in coal transportation does reduce consumer prices of electricity. We know that for 6 years, a 108-mile pipeline, the Cadiz pipeline, carried coal to generate electricity in the Cleveland, Ohio area. The competition provided by that Cadiz pipeline led to a reduction of 46 percent in the rail rate for moving coal. Certainly the consumers of electricity in Cleveland benefited through lower rates due to lower coal transportation.

Second, railroad rates for moving coal are increasing sharply from the first quarter of 1977 to the first quarter of 1982, the previous 3-year period. According to the Bureau of Labor Statistics, railroad rates for moving coal increased about 50 percent.

Third, we know that railroad revenues from coal traffic will increase even though coal pipelines are built. If all the coal pipelines now on the drawing boards now being affirmatively planned are constructed, the railroads, according to our forecast of coal production and consumption, would still be called upon to move more than one and one-half times the coal they are transporting today.

And fourth, there is a Federal role for coal pipelines, interstate movements of various commodities, and coal is within the Federal Government's responsibility in interstate commerce. We do believe that where interstate coal pipelines will serve the national interest, the Federal Government should enable their construction by granting eminent domain to acquire essential rights of way. We believe in this fashion the coal transportation rates will be lower. Coal will capture a greater share of the total energy marketplace in the United States. We believe that coal, our most plentiful domestic and stable, I might add, coal reserves, should have that privilege. Thank you, sir.

Senator DANFORTH. Mr. Lema, is the position you gave us, did you say, the unanimous position of coal producers in the United States?

Mr. LEMA. I might say, sir, on behalf of the National Coal Association, which I represent, that is our standing policy. The National Coal Association has a policy of favoring Federal eminent domain for interstate coal pipelines.

There are those who would allege that some coal producers do not favor that. We have heard reports from certain quarters that small coal producers have been induced for various reasons, perhaps by railroad motivation, to believe that coal pipeline would be harmful. Our position on that is that both large and small coal producers suffer equally from the lack of competition in coal transportation from rail market dominance and that both large and small producers can avail themselves of coal pipelines, particularly knowing that coal must be collected at the head end of the pipeline and that trucks or conveyor systems can easily move that coal from large or small mines.

Senator **Pressler**. Mr. Lema, you mentioned that the Staggers Act gives railroads great freedom in entering into contract service. In your opinion, has this service been used by the railroads, and what effect has contract service had on coal transportation rates?

Mr. **Lema**. Thank you, sir. The contract service, as I recall the latest summary of the Interstate Commerce Commission, which they are obligated to make under the law, reports, and I am approximating, that some 1,500 railroad transportation contracts have been negotiated. Of those, less than 10 percent involve coal. They involve other commodities as well, obviously.

However, the coal transportation contracts have been on the rise. There are now about 150 of them. We note some are very long in duration. We see two of them recently for 39 years, 39-year railroad transportation contracts. Now, certainly that must mean that the railroads can compete with coal pipelines who also deliver coal under contract for a long period of time.

We are very optimistic about our contract service. It is totally unregulated railroad service. It ought to be used more, and that is what allows railroads to compete more effectively with pipelines.

Senator **Pressler**. Supposing future supply and demand for coal increased so dramatically in the United States in the next decade that there will be plenty of coal transportation business for both railroads and pipelines. How accurate is this?

Mr. **Lema**. Sir, I would say, with a great degree of high hope and expectation, as the gentleman from BN said, we believe there will be a 20-percent increase in our annual coal production by 1985 compared to 1981, 50 percent by 1990—this is annual production—and an 80 percent by 1995. That is an increase.

We believe that rail carriers, pipeline carriers and water carriers, they are very important to moving coal long distances. All three modes can move coal, should compete for it, and there will be plenty of business for all.

Senator **Pressler**. Your testimony states that the Cadiz Pipeline in Ohio no longer operates because the competing rail line underpriced its rates. Could you please explain the situation in greater detail? What would prohibit this from happening again if the expensive pipeline is built and the competition reduces its rate? What is to guarantee the pipeline will in fact remain in business after all that investment?

Mr. **Lema**. Sir, we believe that private business actually does in the free marketplace have to take risks. We believe railroads, as private entities, have to take risks. So do pipeline carriers. Lord knows coal producers do. We believe the risk has to be carefully weighed. We believe that in most instances if you, in fact, have a long-term coal supply commitment, and most electric utilities need a stable source of coal for 25, 30, and 35 years, that a coal pipeline will not be negated in importance, that it will be utilized for the full duration of its planned operation period. We don't think that is a problem.

Senator **Pressler**. Thank you, Mr. Chairman.

Senator **Danforth**. Thank you, Mr. Lema.

[The statement follows:]

STATEMENT OF JOSEPH E. LEMA, VICE PRESIDENT, TRANSPORTATION, NATIONAL COAL ASSOCIATION

Mr. Chairman, my name is Joseph E. Lema. I am vice president for transportation of the National Coal Association. NCA represents coal producers, coal sellers, and other organizations associated with America's coal industry.

I am appearing before the Senate Surface Transportation Subcommittee for two reasons. The first is to show that coal pipelines are an effective form of energy transportation, as clearly demonstrated during the previous three decades, whose construction should be facilitated by the granting of eminent domain needed to acquire pipeline rights-of-way. The second reason for appearing before you today, Mr. Chairman, is to state our firm support for the bill, S. 1844, on which the subcommittee has scheduled this hearing. For about 25 years the building of coal pipelines has been stalled due to a lack of eminent domain. The Congress can correct this situation by the passage of S. 1844, The Coal Distribution and Utilization Act of 1918. We believe that the legislation, reported by the Senate Energy and Natural Resources Committee, now should be brought to the Senate floor for consideration and passage.

Mr. Chairman, the question before the Congress with regard to S. 1844 is simple. Should railroads holding unmistakable market dominance over the movement of coal face competition in coal transportation furnished by coal pipelines, and should the Congress facilitate such competition by removing a serious obstacle blocking coal pipeline construction, i.e., the lack of eminent domain? In most circumstances, rights-of-way cannot be secured otherwise due to opposition of the railroads and other obvious hurdles encountered in attempting to obtain any such continuous rights-of-way for hundreds of miles. We believe: (1) railroads should compete with coal pipelines so that competitive market forces will keep coal transport rates reasonable in relationship to transportation services provided; and (2) the Congress should facilitate competition for coal transportation by passage of S. 1844, granting interstate coal pipelines the use of eminent domain.

Coal pipelines are an effective form of energy transportation whose construction should be facilitated by the granting of eminent domain for use in acquiring pipeline rights-of-way.

Mr. Chairman, the evidence that coal pipeline technology is sound and that coal pipelines are effective competitors with the railroads has mounted steadily and expanded substantially during the previous three decades. The coal industry, the electric utility industry, consumers of electricity, and others are well aware that it is in the nation's interest to facilitate construction of coal pipelines. It is especially noteworthy that in a July 22, 1982 report on a study by the Joint Economic Committee of the Congress, it is recommended that, to facilitate the transportation of coal, Congress should consider enacting legislation to permit the granting of eminent domain for the construction of coal slurry pipelines.

In line with the Joint Economic Committee's recommendation, we agree that immediate action is needed to assure that, to the maximum practicable extent, coal carriers must compete for coal traffic, resulting in a mix of coal transportation that is reliable, efficient and reasonably priced. Coal piplines are a proven method for carrying coal in large amounts over long distances economically, with no disruptive impact on communities traversed. The granting of federal eminent domain for interstate coal pipelines is essential to prevent them from being stymied by railroads who wish to block their construction and thus avoid competition for coal movement.

Where there are no navigable rivers, railroads possess heavy dominance over coal transportation. For instance, a 1979 NCA study shows that 85 percent of the coal carried by the railroads is captive and has no practical alternative transportation available. To say that railroad market dominance does not exist because coal could be moved by trucks simply does not make sense. Certainly, no reasonable person would say that it is practical to utilize 500 to 750 trucks instead of one railroad unit train to move 10 to 15 thousand tons of coal several hundreds of miles.

Therefore, we must have the ability to construct coal pipelines in order to assure competition for coal traffic. Pipelines will alow market forces in the transportation sector to keep transport rates reasonable and coal transportation service reliable and efficient. Competitition, not government regulation, is the best way to assure rate reasonableness—an objective that must be met to keep coal competitive in the domestic and world markets for energy. We must not let coal's captivity to the railroads result in unreasonably high rail rates. The result would be inflated coal prices, less than full use of America's coal here and abroad, unfortunate losses in the U.S. balance of payments in international trade, and higher consumer prices for electricity.

We recognize that railroads have, and will continue to have, an important role in moving coal and other bulk commodities. The railroads carry about five tons out of every seven and one-half tons of coal produced today. The coal industry's overriding concern is that coal shippers have no options with regard to competitive long-haul inland transportation in most instances. With transportation already often accounting for 50 to 75 percent of the delivered price of coal, it is imperative that all readily available transportation technologies be employed to keep transport rates reasonable.

Coal pipelines potentially represent the most broadly usable source of effective competition with railroads for coal traffic across the U.S. in the 1980s and beyond. They are neither novel nor new. One such pipeline, the Cadiz Pipeline, operated for several years in Ohio. Another, the Black Mesa Pipeline, is functioning today with a capacity for carrying five million tons of coal annually about 273 miles from coal mines in Arizona to an electric utility plant in Nevada.

The Cadiz Pipeline was America's first coal pipeline. It also was used to move coal to a utility. It runs from Cadiz, Ohio to a location near Cleveland, a distance of 108 miles. The pipeline operated from 1957 to 1963 by which time the railroads underpriced it by introducing trainload rates and eventually the concept of coal unit trains. Certainly this is a clear and positive sign that competition with the railroads for coal transportation has demonstrated a capability for keeping transport rates reasonable and improving transportation service.

The cost savings benefits of coal pipelines have been amply demonstrated by the Cadiz Pipeline. The railroads had been raising their freight rates almost yearly for electric utility steam coal shipped from Cadiz, Ohio to Cleveland. They even raised their rates after the pipeline had just started operation in 1957 to a new high of $3.47 per ton. The pipeline transportation rate was initially only $2.20, a savings of $1.27 per ton. Although the rate had increased to $2.95 by 1963, the utility realized an enormous savings on the 7.1 million tons of coal shipped through the pipeline over the six years it was in operation. The obvious result was lower electric bills for the people of Cleveland.

To improve their competitive position with respect to the coal pipeline, by 1963 the railroads had reduced their freight rate to $1.88 per ton, a reduction of about 46 percent from the rate in effect six years earlier. Moreover, the reduced rate applied not only to the coal that was being transported in the pipeline, but also to coal shipped to other electric utility plants. Thus, the total savings amounted to $9.5 million a year. And, even though the rail rate went up to $2.39 in September of 1973, this still amounted to a 31 percent savings over the rate charged in the mid-1950s. Again the result was that the people of Cleveland were able to enjoy lower electric bills.

Thus, as strange as it may seem, the pipeline also helped the railroads by forcing them to become more efficient. In the past, railroad cars would often be moved from one marshalling yard to another and left sitting on sidings for a considerable length of time. This was a serious waste of capital because the rolling stock was used only about ten percent of the time. The competitive force of the pipeline resulted in the development of trainload rates and the unit train concept in which rail cars are loaded and unloaded while the train moves. With this new found efficiency, the railroads were able to maintain lower freight rates than otherwise would have been possible and were still able to make a reasonable profit. Clearly, the effectiveness of the Cadiz Pipeline has benefited the country by stimulating broad use of coal unit trains and their economies of scale.

The Black Mesa Pipeline in operation today brings coal across Arizona to a utility plant in southern Nevada. The pipeline is owned and operated by the Southern Pacific Company which also owns a Class I railroad. When asked about the operations of the Back Mesa Pipeline during a congressional hearings, a former chairman of the Interstate Commerce Commission indicated that the ICC, under whose jurisdiction coal pipelines now fall, had no complaints about rates or service from any of the parties involved. Obviously, therefore, coal pipelines represent most satisfactory transportation systems for coal suppliers, shippers, receivers, and transporters, as demonstrated by present circumstances.

It is not necessary to burden the record of these hearings with a recitation fo the merits of the coal pipeline. Our interest is not in the pipeline per se, but rather in its availability when economies, technology and market forces support its use. In order for this to occur, we believe that unrealistic obstacles should not be allowed to prevent this method of transportation from competing on an equal footing with other transportation modes.

It is not in the public interest to deny coal pipelines their desirable and appropriate place in the mix of coal transportation systems simply because the dominant transportation mode, the railroads, are unwilling to face such competition and create barriers to pipeline construction by refusing to negotiate reasonable agreements on pipeline crossings of railroad property. It is often impossible to assemble coal pipeline rights-of-way without eminent domain. We believe that inasmuch as the federal government has a responsibility for interstate commerce, it is proper for the federal government to remove such obstacles by granting federal eminent domain required to assemble rights-of-way for construction of interstate coal pipelines.

Another compelling argument in support of granting federal eminent domain for interstate coal pipelines is the recently granted authority for railroads to furnish contract service in addition to tariff service for specific traffic. The Staggers Rail Act of 1980, effective October 1, 1980, for the first time in the law on interstate commerce has clearly provided that rail carriers and shippers may enter into contracts which are essentially unregulated, for the movement of certain freight between specific traffic originations and terminations. Contracts may include terms and conditions which cover rates, service, equipment, and other elements that pertain to individual freight and commodity movements. Thus, rail carriers are authorized to negotiate contracts with coal shippers so that coal supply systems including provision of essential transportation can be planned and managed in an efficient, cost effective manner over extended periods.

This important change in the law on interstate commerce to enable and encourage railroad contract transportation service has been utilized already to a substantial degree for the movement of various classes of railroad freight and commodities, including coal, by railroads and shippers across the U.S. Contract service by now is a widely accepted practice—one that makes it entirely possible for railroads to compete with pipelines for coal traffic. Therefore, not only are railroads physically capable of providing efficient and reliable coal transportation services, they also have been given the ability to execute transportation contracts which, among other things, stand to avert having valuable traffic, such as coal, diverted to other transport modes, for example, pipelines. With this in mind, we find no supportable reasons for railroads to oppose coal pipeline eminent domain.

For more than two decades the building of coal pipelines has been stalled due to the lack of eminent domain a situation which now can be corrected by the passage of S. 1844, the Coal Distribution and Utilization Act of 1981.

A key factor which carries special importance today in the search for effective coal transportation competition with the railroads is that rail rates for moving coal have been increasing at an alarming pace. From the first quarter of 1979 to the first quarter of 1982, a period of only three years, rail rates for coal traffic on the average have leaped upward by more than 50 percent. This occurred at the same time that mine-mouth prices of coal only increased about 19 percent. Further, we have seen that increases in rail rates for coal traffic are growing faster than for rail freight in general. In the previous year ending in June 1982, rail rates for coal traffic increased 30 percent more than increases in rates for all rail freight including coal. An added element of concern is the fact that, whereas carloadings of coal originated by the railroads were nearly the same in 1981 as in 1980, revenues produced by coal traffic jumped from 4.96 billion dollars in 1980 to 5.87 billion dollars in 1981, an increase of more than 18 percent.

With railroads holding such broad dominance over coal transportation and with rail rates for coal traffic showing such alarming growth trends, we are convinced that we must search vigorously for effective competition for the movement of coal. Competition produces beneficial effects in terms of lower delivered prices of coal and lower consumer prices of electricity and of goods and products requiring high amounts of energy in their production. And, the adverse implications of a lack of effective competition also can be seen in constant railroad opposition to the granting of federal eminent domain for interstate coal pipelines. Railroads seek to block pipeline construction and stall potential competition for the movement of coal, which is now threatened by drastically higher rail rates. The value of effective coal pipeline competition with the railroads, therefore, is evident not only in the well documented ability of coal pipelines to move high tonnages of coal at reasonable prices, but also by virtue of the motivation coal pipelines can instill toward keeping rates reasonable and service adequate due to market competition among rail and water carriers.

Competitive coal transportation will grow in importance as coal production and utilization increase in the 1980s and the 1990s. We forecast that annual coal production in the U.S. will grow to 985 million tons in 1985, 20 percent above 1980; 1.23 billion tons in 1990, 50 percent above 1980; and 1.48 billion tons in 1995, 80 percent above 1980. This expected growth in annual production of coal will place significantly higher demands on our nation's transportation network. Further, Mr. Chairman, there is no doubt that the nation's railroads will be called upon to carry much higher amounts of coal. Even if all coal pipelines now on the drawing boards are completed they would carry only 175 million tons annually in the 1990s. Railroads still would be called upon to move more than one and one-half times the amount of coal carried at present, thus generating much higher revenues for the railroads notwithstanding the existence of coal pipelines.

Mr. Chairman, in summary, I would like to cite seven fundamental factors for supporting coal pipeline eminent domain and to urge early Senate floor consideration and passage of S. 1844:

1. Competition for movement of coal will reduce its delivered price and lower consumer prices for electricity.
2. Coal pipelines will lessen railroad dominance over coal transportation by furnishing effective competition.
3. Railroad rates for moving coal are increasing sharply, a situation which can be ameliorated by greater competitiveness in coal transportation.
4. Railroad revenues from coal traffic will grow even with coal pipelines.
5. The use of water for coal pipelines is clearly left to the decision of the states in the pending legislation. S. 1844 does not appropriate water for coal pipelines, it simply provides eminent domain for right-of-way acquisition.
6. Coal pipeline technology works today in the West as shown by the Black Mesa Pipeline, and previously has been effective in the East by virtue of the Cadiz Pipeline.
7. The federal government has a responsibility for interstate commerce; this responsibility should be fulfilled with respect to energy transportation by the provision of federal eminent domain for interstate coal pipelines.

Mr. Chairman, this completes my testimony. I will be glad to respond to questions now and, if desired, in writing subsequent to this hearing.

Senator DANFORTH. Next we have Howard Pyle, representing the Edison Electric Institute.

STATEMENT OF HOWARD PYLE, EDISON ELECTRIC INSTITUTE, DIRECTOR OF FEDERAL RELATIONS, HOUSTON LIGHTING & POWER CO.

Mr. PYLE. Thank you, Mr. Chairman.

My name is Howard Pyle, with Houston Lighting & Power, and I represent the Edison Electric Institute. Today I represent the only consumer group among the people who are testifying before you.

Among the people who support the passage of S. 1844 there is included some labor representation here. We happen to have the construction trades, the Teamsters, Pipefitters and others who support this legislation. In addition, the Consumer Federation of America supports S. 1844.

The labor unions support the legislation because they gain jobs even though we have just heard that one union felt there might be a loss of jobs. The Consumer Federation of America is supporting the legislation for the same reason we are. They believe it will have a very salutory effect on rates as a result of having the competition, which we approve of which you encouraged, which this very committee has encouraged in the passage of the Staggers Rail Act.

We are, of course, captive shippers. We cannot ship our coal by trucks as grain shippers can. It is very difficult to handle our large volumes. We also cannot shutdown coal plants. We have such a heavy commitment to railroads, that we intend to use them now and we intend to continue using them in the future. We are the fourth largest electric utility in the United States and we have more than 1,000 railroad cars ourselves which are operated from the Powder River Basin down to the Houston gulf coast area.

Everyone benefits by having coal slurries. What we have seen here is that the real question is not whether we are going to have eminent domain; the question has been in these hearings whether there should be competition for the railroads. We have heard many reasons why the railroad should continue to have captive shippers and why they should be able to subsidize grain shipments or other shipments by the transportation of coal. There have been implied and direct threats against shippers and consumers.

If there were any pipelines available and they were built to the Houston area, we would expect to use both pipelines and railroads. We certainly would expect that the railroads would not bring down less coal than they presently bring down.

I might point out the OTA study was conducted in the midseventies. At that time we didn't have a coal plant on stream. This year we expect to burn between 8 and 9 million tons of coal. That is a hefty increase in less than 10 years.

I don't know of any utility planning new plants except for perhaps peaking purposes, unless they are coal fired. We ourselves, as just one company, are projecting spending more than $1.1-billion a year between now and 1985 on new plant and construction, and it is primarily coal. We would like to see coal used. We happen to think that coal slurries are good for the environment. You don't have noise, you don't have dust, you don't have a lot of land mass taken up as is taken up with railroad and railroad facilities, and we think there is a lot of benefit to everyone.

I think Joe Lema really brought out very nicely the question of coal contracting. The Staggers Rail Act took the concept of contracts and said, OK, railroads, you can now either be a common carrier or a contract carrier. Pipelines have the same right. We can all compete for the business, and if the railroads want to compete for our business, we encourage them to do just that. All we would like to do is give them the opportunity to compete.

Thank you.

Senator DANFORTH. Thank you, Mr. Pyle.

The contracts on which the construction of the coal slurry pipeline would be based would be long term, take-or-pay contracts. How long would long term be? Do you have any view on that?

Mr. PYLE. Long term can be anywhere from 10 years to 35 years, depending upon what the size of the reserves are that you are trying to transport. When you say take or pay, what you are really saying is you are contracting to buy. Let's keep it in perspective. Of course, the railroads right now in the short term by their volume rates effectively give us take-or-pay contracts now.

If we don't carry the volume, we get our rates jacked up substantially. In addition, the railroads have the ability to give the same contract terms as coal slurry pipelines. Part of that is due to negotiation and you can't tell that ahead of time. You may have to enter into a shorter term contract to have an agreement that provides service for a specific length of time. The reliability of electrical generation requires that we try to establish some type of certainty with regard to the availbility of fuel supply at a constant rate.

Senator DANFORTH. Do you have any judgment, guess or estimate as to the typical length of time for such contracts?

Mr. PYLE. No one has entered into a long term contract, to my knowledge, right now. The Middle South system has offered to both the railroads and ETSI the opportunity to make long term contracts, or in other words, propose contract terms which they will then review. We are currently in negotiations with both Burlington Northern and ETSI as to whether they would provide suitable contacts.

Right now we are not so far along as Middle South. It is not even clear there might be an ETSI terminal in Houston, but we are in the basic negotiation stage. If we could make a 15- or 20-year contract on what we think are reasonable terms based upon inflationary escalators, we would enter into it, whether it be railroads or pipelines or possibly both.

Senator DANFORTH. Last Monday in Kansas City we had testimony from Kansas City Power and Light, and they own coal reserves in Wyoming. Is this typical of utilities, to own coal reserves?

Mr. PYLE. No, it is not typical. I believe Joe Lema went into this somewhat. Most utilities get leases on particular coal-producing properties for a particular time for particular takes at a particular price, and then we are locked in, of course, to that particular area. And determining whether we are going to enter into a particular coal lease or not, it doesn't matter whether it is the Powder River Basin, Illinois coal or Appalachian coal, we will take transportation into consideration.

Obviously, from the Houston gulf coast region, should we not be able to get any kind of competition that would allow us to have a reasonable certainty of rates, there is a possibility that we may have to look to other less suitable coal sources that might be able to use another type or mode of transportation, such as water transportation. So we do take that into consideration in bidding for our coal properties in the first place.

Right now we have all of the reserves already contracted for that will last us until 1990. Of course some of those are Texas lignite which are currently under construction, but after 1990 it will all be coal from outside of Texas. So right now we are trying to plan. You have heard about the 6- to 8-year lead time. That is approximately right for the construction of a coal plant. You have to make it site specific for the mode of transportation and the type of coal you are burning. We are in the mode right now for contracting for future coal.

Senator DANFORTH. Do you have any further questions?

Senator PRESSLER. No, thank you.

Senator DANFORTH. Thank you very much.

Mr. PYLE. Thank you.

[The statement follows:]

STATEMENT OF HOWARD PYLE, DIRECTOR, FEDERAL RELATIONS, HOUSTON LIGHTING & POWER CO.

My name is Howard Pyle. I am Director of Federal Relations for the Houston Lighting & Power Company (HL&P), an investor-owned electric utility serving a 5,000 square mile area of Houston that includes about one-quarter of the State's population. I am appearing today on behalf of my own company and on behalf of the Edison Electric Institute, the national association of investor-owned electric utility companies. Member companies of the Institute provide 77 percent of all electric power purchased in the United States.

Mr. Chairman, we strongly support enactment of S. 1844, the Coal Distribution and Utilization Act, which would facilitate the development of coal slurry pipelines. Slurry pipelines can provide a much-needed supplementary means of transporting the very large volumes of coal that will be required as utilities and industrial companies increase their coal utilization and reduce their relative dependence on gas and oil-fired facilities.

My testimony can be summarized as follows:

I. Slurry pipeline technology is a proven alternative to rail transportation. Slurry pipelines can provide competition in the transportation of coal and have lower service costs.

II. The Staggers Rail Act provides the railroads with considerable pricing freedom in dealing with essentially captive coal shippers. This freedom must be balanced by effective competition in the transpostration of coal.

III. The use of coal slurry pipelines will help to reduce our dependence on foreign oil. The resulting increases in the use of coal will ensure that the total employment in the coal transportation industry, including railroads, will also increase. In addition, the construction and operation of coal pipelines will provide a significant number of new jobs in the construction and building trades, as well as in the industries, such as steel, which supply those trades.

IV. Competition will require railroads to make pricing and service decisions based upon market-place conditions. As a result, railroads will become healthier and more efficient, and our whole economy will benefit.

The history of the Black Mesa Pipeline and the Ohio Pipeline leaves no doubt about the technological viability of coal slurry pipelines. The technology is proven and effective, and requires items that are essentially available off-the-shelf from a variety of domestic sources. In fact, S. 1844 currently requires that to the maximum extent possible, all materials used in the construction and operation of slurry pipelines be produced by American industry.

The Mohave Generating Station in southern Nevada has reliably produced power for the Southern California Edison Company for more than a decade. The coal for this plant, transported via the Black Mesa pipeline, costs 83 cents per million BTU's and is the cheapest fuel for any fossil fuel plant on the Southern California Edison system.

We believe that the rail rates for hauling of our coal would be entirely different were there a viable coal slurry pipeline industry in operation today. Based upon our experience with the Ohio pipeline, coal slurry lines would provide an alternative form of transportation that would at the very least create a competitive incentive for the establishment of more reasonable rates by railroads.

We are convinced that such an incentive is urgently needed, especially in the deregulatory atmosphere created by the Staggers Rail Act of 1980. We are equally concerned that without reasonable transportation rates, attainment of the national goals of developing utilizing this country's vast coal resources, with a corresponding decrease in our dependence on foreign oil, will be seriously jeopardized.

The reason the electric utility industry needs coal slurry pipelines is basically simple: we have no alternative to which we can turn in the case of unfair coal transportation rates. As a result, we and other captive shippers of coal are subjected to rate increases which have far exceeded the actual increases in rail service costs. My company's decision to build new coal plants in 1974, for example, was greatly influenced by the rates then quoted by the rail carriers which would be serving those plants. However, the rate of $11.44 per ton we were originally quoted has now risen to an actual charge of $25.80 per ton. This translates into an increase of more than 100 percent.

As consumers of 80 percent of the steam coal burned in the United States, the electric utilities are particularly sensitive to coal transportation costs, because these costs are in turn passed directly on to electric customers in their monthly bills. The owner of a proposed power plant, or one contemplating conversion to coal, must decide upon the package (coal source, transportation mode, and power plant sites) that minimizes total cost. We see coal slurry pipelines as a necessary and viable alternative transportation system for coal users, in order to provide competition and to supplement the transportation of coal by rail. That railroads and pipelines can be complementary as well as competitive systems is illustrated by the fact that the Black Mesa pipeline currently in operation in Arizona is owned by the same company which runs the Southern Pacific Railroad, a carrier with a very strong transportation presence in the Southwest.

Available evidence indicates that even with pipelines, railroad coal traffic will continue to increase. The coal industry forecasts that annual production in the U.S. will grow to 985 million tons in 1985, to 1.23 billion tons in 1990, and to 1.48 billion tons by 1995. In addition to the normal uses of coal as a boiler fuel, coal usage can increase due to new technologies. For example, the technology of a coal-water mixture is being developed that could displace oil directly without boiler modification. The use of this mixture has been tested under the auspices of the Electric Power Research Institute which has found that even greater portions of sulfur and ash can be removed than in conventional firing.

At peak opertional efficiency, all the coal pipelines currently on the drawing board could only carry 175 million tons annually in the 1990's. Pipelines will not encroach on the railroads' traffic volumes, nor will they "skim the cream" off the top of the coal transportation market; they will only carry a portion of the increase projected for future years. The railroads will still be required to sharply increase their present volume levels in order to meet the projected demand. It should also be noted that coal consumption could be further increased as a result of the competitive presence of pipelines, encouraging utilities to convert to coal. In the absence of competition, such utilities might choose to continue to rely on oil and natural gas (or, as a Florida utility is now doing, actually import coal from abroad), due to the high cost of U.S. rail transportation. The railroads will always be free to compete with pipelines for traffic by offering lower rates for their service. In fact, it was the reduced rail rates brought about by the competitive presence of the Cadiz pipeline in the 1960's that operated to eventually put that pipeline out of business and directly led to the widespread use of unit train service for large volume coal movements.

S. 1844 is a job maker not a job loser. Congress' own Office of Technology Assessment performed a study and found that any reduction in rail labor needs as a result of pipeline construction would not occur, if at all, until at least the year 2000. If projected increases in coal production prove to be accurate, such reductions will never occur. In contrast, it is estimated that coal slurry pipelines will create over 150,000 construction, manufacturing and mining jobs over the short term. The seven major pipeline systems currently in the planning stages will require some 7,000 miles of steel pipe, 3 million tons of steel, and over 1,000 trucks, and will pay an estimated $2,817 billion in construction wages. Therefore, we do not believe that there will be any adverse impact on rail employment as a result of enacting slurry legislation.

On the previous occasions when the Congress has considered coal slurry legislation, the railroads have argued that they would be at a competitive disadvantage to slurry pipelines because the pipelines would have the ability to enter into transportation contracts. Since the passage of the Staggers Act, the railroads have had explicit statutory authority to enter into transportation contracts and, therefore, there should be no further concern about the pipelines' ability to contract causing competitive disadvantage to the railroads.

I should add that although the railroads can enter into long-term contracts, they have not been willing to do so for the majority of utility coal movements. We think the reason is fairly simple. Where, as is often the case, a railroad already enjoys a monopoly position over the transportation services required to move coal from a producing mine to a utility's plant, and the utility is committed by contract to obtain its fuel supplies from that mine for up to twenty years, there is little incentive for a railroad to enter into a transportation contract. A contract would establish the rate and the methodology for increasing the rate, and as a result would restrict the carrier's ability to impose rate increases at will. In the absence of a contract, however, the carrier is free to file rate increases whenever it desires and in whatever amounts it desires.

An example of this problem is presented by the experience of New England Power Service, a utility serving parts of Massachusetts. New England Power tried for over a year to enter into a contract with the Chessie System for the transportation of approximately one million tons of coal annually from the Island Creek Company's Upsher Mine at Ten Mile, West Virginia, to Baltimore, Maryland. The Chessie System refused to sign, safe in the knowledge that the utility was committed to purchase the coal from this origin, thereby ensuring Chessie of a monopoly over the required transportation services. There being no chance that Chessie could lose this traffic to another carrier, there was absolutely no incentive for Chessie to agree to a contract.

A central theme of the Staggers Rail Act is to encourage competition in the transportation industry, and to allow competition rather than government regulation to establish and maintain reasonable rates for transportation. For example, the Staggers Rail Act defines as part of the rail transportation policy of the United States "to foster sound economic conditions in transportation and to ensure effective competition and coordination between rail carriers and other modes." We believe that enactment of legislation which would encourage and facilitate construction of coal slurry pipelines would introduce an element of effective competition into the transportation market. Such a development would be directly responsive to the goals of the Staggers Act.

We support and need a viable railroad industry. However, we should not be paying excessive rail rates due to the absence of transportation competition. The Staggers Act placed emphasis on the railroads' achieving financial stability through honest and more efficient management, and streamlined operations, as well as through higher transportation rates. In the absence of effective competition, however, there is no incentive for the railroads to make the necessary internal changes to become more efficient. So long as they maintain their present monopoly over coal transportation, increased rail rates on captive coal traffic will be the primary means by which the goal of "revenue adequacy" is pursued. We submit that such a situation perverts the intent of Congress as manifested in the goals set forth in the Staggers Act.

As the Senate Commerce Committee stated in 1979 in describing one of the central themes of the bill that eventually became the Staggers Act:

"At this time, there is a need for a separate railroad policy which incorporates many of the existing policy declarations but places increased emphasis on competitive market forces.

* * * * * * *

". . . [I]n implementing congressionally mandated policies the Interstate Commerce Commission shall consider as being in the public interest: maximum reliance on competitive market forces and on intramodal and intermodal competition . . ."

We agree, and in asking for your support for S. 1844 we ask no more than that you support free market competition. As coal escalates, the railroads will have all the coal they can haul. The necessary supplemental role to be played by slurry pipelines must not be delayed if we are to get all the energy we need for economic recovery and energy independence for the future.

Mr. Chairman, the removal of artificial barriers to coal slurry pipelines will benefit everyone. We ask that you and this Committee join with us in seeking the early enactment of S. 1844.

I would be pleased to answer any questions.

Senator **Danforth**. The final witness is John McCormick.

STATEMENT OF JOHN McCORMICK, WASHINGTON REPRESENTATIVE OF THE ENVIRONMENTAL POLICY CENTER

Mr. **McCormick**. Good morning, Senator. My name is John McCormick. I am the Washington representative of the Environmental Policy Center. I have a fairly lengthy statement I would like to submit for the record, and in deference to the time remaining, I will just summarize the statement.

Mr. Chairman, this issue is not new to this Congress. We are all aware of that. I think we have heard most all of the arguments that could be made both for and against the legislation. I will just reiterate the Environmental Policy Center's position, and that is we are not opposed to the technology of moving coal by slurry pipelines. We are, in fact, opposed to the granting of Federal condemnation for what is essentially a private interest carrier using those Federal powers of condemnation across private lands, and that affecting, quite likely, the potential for a Western Governor's securing his State's water right is, in our estimation, an abuse of that Federal power.

We have said time and again, Senator, that the problems that the slurry pipelines face when trying to cross railroad rights-of-way could be better handled by an amendment to the Interstate Commerce Act, where the Commission or ICC would be empowered to negotiate an easement across those rail rights-of-way, and that would not, of course, require Federal condemnation powers.

To follow that route, Senator, you would have the State laws applying to the private and State lands, and the Federal Land Policy Management Act applying to Federal lands. And that instance all land holdings would be covered and the slurry pipelines could secure their rights-of-way through State courts.

On the environmental impacts of coal slurry pipelines, we do agree they are safe, silent, and submerged, but we haven't really talked about the problem of disposing of the waste water. The one pipeline proposed from Illinois to Florida might carry as much as 7 to 14 billion gallons of water per year, and that water is separated from the coal. The water is highly contaminated and must be treated.

We have seen no demonstrated proof that the industry can treat that water sufficiently that it could be discharged into streams or rivers. In light of that, Mr. Chairman, I don't think that slurry pipelines are entirely environmentally safe. In fact, I think they propose a lot of risks.

Thank you, Mr. Chairman.

Senator DANFORTH. Thank you.

Do they ever rupture?

Mr. MCCORMICK. There was an instance with the Black Mesa Pipeline operating from a strip mine in Arizona to a powerplant in Nevada. It did rupture 3 years ago. It was quite a significant spill, and of course it was far removed from the powerplant, and to my knowledge, the coal has not been retrieved.

Senator DANFORTH. All kinds of pipelines rupture, do they not?

Mr. MCCORMICK. There was, in fact, an oil pipeline running through or near a wilderness area in Wyoming that ruptured about 4 weeks ago, and that caused considerable problems.

Senator DANFORTH. What are the consequences if a coal pipeline ruptures?

Mr. MCCORMICK. Well, depending upon the location of the rupture, you have many hundreds of thousands of gallons of contaminated water and coal flowing in to possibly a wetlands area, the contaminants seeping into water tables, perhaps. But again, the rupture is likely to be along distance from either the mine or the powerplant, so where would you take the coal and who would be liable for cleaning up that spilled coal?

Senator DANFORTH. It is not just the spilled coal, like something spilled out of a truck; it is a liquid.

Mr. MCCORMICK. It is finely ground coal that would be carried as far as the water it was associated with could flow, so it might cover several acres, perhaps. But again, if it spilled into a stream or a wetlands, it could contaminate hundreds of acres, dependent upon where the break was located.

Senator DANFORTH. Your suggestion is that if there is a problem with rail crossings, if the problem with pipelines is that they are being held up by the railroads and they can't construct pipelines across railroads, that that can be solved in a way that is more precise, more specific to the problem than granting sweeping powers of Federal eminent domain. Is that correct?

Mr. MCCORMICK. Yes, very much so, Senator. In the first case, the Secretary of the Interior or the Secretary of Energy would be granting the Federal eminent domain power under the House or

Senate legislation. Well, they are not entirely responsible for national transportation policy where the Interstate Commerce Commission is. There the decisions made would be more applicable to the Nation's entire needs, not just for the needs of a particular utility.

There is another problem with Federal condemnation of private lands. In the West we are talking about condemning the width of the rail right-of-way because tracks run predominantly east and west, but in the East, tracks run more in the north-south direction, so that the Illinois-Florida pipeline might find itself in a position to condemn not the width of the right-of-way but the length of the track right-of-way through the steep Appalachian Mountains, which would represent to them the levelest route to go. What would be the fair market value of that kind of easement? What would be the cost of constructing new tunnels and passes through those mountains if the pipeline had to negotiate that itself?

Senator DANFORTH. Thank you very much, sir.

Mr. MCCORMICK. Thank you, Senator.

[The statement follows:]

STATEMENT OF JOHN L. MCCORMICK, ENVIRONMENTAL POLICY CENTER

Mr. Chairman, and Members of the Subcommittee: It is a pleasure to appear before you this morning to offer the views of the Environmental Policy Center on this legislation. The Center has followed the debate on coal slurry pipeline legislation since 1974 when the Senate considered S. 3879. Since then, the Center has provided testimony before the Congress on ten occasions on which this matter was deliberated.

Throughout the debate, the Center has maintained that coal slurry pipelines may, under certain circumstances, be preferable to the construction of other modes of coal transportation. One case in point is the presently operating Black Mesa coal slurry pipeline delivering coal from the Black Mesa coal strip mine in North Central Arizona to the Southern California Edison Co.'s 1636 MW Mohave plant in Bullhead City, Nevada. To have constructed a new railroad delivery system between the mine and the plant would have necessitated extensive surface damage to the land in a region where reclamation of disturbed vegetation cannot be assured due to the arid climate and minimal topsoil. That line continues to operate reasonably well; though, it did suffer a major rupture several years ago resulting in considerable loss of unretrieved coal and slurry water. At its terminus, the pipeline poses a serious problem of wastewater disposal which the utility has chosen to remedy by expanding its evaporation pond capacity.

The arguments surrounding this and similar coal slurry pipeline legislation are legend by now. Certainly, this Congress has given extensive coverage to all of the issues raised on both sides of the issue. Among them, the two central points of contention are: (a) the granting of the Federal powers of eminent domain to qualified coal slurry pipeline projects, and (b) the assurance to Western states' governors that their water rights will be protected. This is not to diminish the possible environmental, economic, and labor displacement concerns woven into this issue. Each of those problems must be addressed during the permit approval process required of a pipeline project prior to construction. No project will reach that plateau, however, unless it has been judged to be in the Nation's interest to build the line. Having been so determined, the project sponsor can then acquire rights-of-way over, under, or through private lands by the use of federal condemnation powers. It is from this extraordinary federal power that the serious politics of the issue of coal slurry pipelines flow.

Eminent domain has been defined as the power of the sovereign to take property for public use without the owner's consent upon making just compensation available to the owner. The predominate concept of eminent domain is that it is an inherent power necessary to the very existence of the government. It exists in absolute and unlimited form but there are jurisdictional, constitutional, and statutory limitations upon its use. The Federal government can exercise eminent domain powers against State lands but the States cannot exercise such powers against Federal lands without the consent of the U.S. government. Two basic limitations upon the use of the powers of eminent domain are that the owner of the condemned land must be paid a just compensation and the power must be exercised for a public purpose.

If a pipeline originates in a State wherein the coal is delivered to supply an intrastate electric utility or industrial customer, it is easy to quantify the benefits that State might derive. It is another matter entirely, when a coal slurry pipeline merely traverses State lands without providing a transportation or delivery service to an economic interest within the State. Regardless of the possible impacts upon a State, however, the Senate Energy and Natural Resources Committee bill (S. 1844), would provide condemnation powers to the pipeline project for the purpose of facilitating the crossing of State and private lands.

The findings imposed upon interstate coal slurry pipeline proposals, as deliniated in S. 1844, are so general as to allow any slurry pipeline sponsor to qualify for the Federal powers of eminent domain. The National interest test requries that the pipeline promote competition, help meet national coal distribution needs, contribute to the displacement of imported oil and be no more environmentally destructive than other coal transportation modes. Since some of these findings would be subject to speculative opinion and not subject to judicial review or public scrutiny, it would appear the easiest task of the project proponents would be the receipt of the federal condemnation rights.

From its earliest introduction to the Hill, the steadfast justification for this legislation has been the resolution of the railroads' monopolistic barrier to coal slurry pipeline construction by refusal to negotiate easement rights over the rail routes. The Energy Transportation Systems, Inc. (ETSI) pipeline project stretching from Gillette, Wyoming to Arkansas, Texas and Louisiana was forced to resort to expensive litigation to secure its route over 66 railroad rights-of-way. By winning 65 of its cases, it pieced together a route which crosses rail lines built above lands granted to the railroads by the federal government.

It is evident that railroads pose disincentives and outright barriers to slurry competition. This situation should be resolved by federal legislation and not by repeated court challenges. However, the use of Federal condemnation powers which affect all interests in the path of the proposed pipeline is a clear example of legislative overkill. This remedy creates further problems and brings into being, political powers which have pitted themselves against the passage of this bill.

A more prudent solution—and one the Environmental Policy Center advocates—would be an amendment to the Interstate Commerce Act assuring easement over rights-of-way for legitimate competing modes of transportation. The I.C.C. could make a finding that such guaranteed aeasement was necessary to complete the project; would not result in significant economic harm to the targeted transportation system; and, competition would be promoted. Upon making such findings, the Commission would determine a fair market value for the easement and oversee the transfer of the easement.

This approach places the issue of competition among transportation systems before a government entity best equipped to make a decision which takes into account all factors relevant to a sound National transportation policy. I.C.C. has the technical expertise necessary to assure that all economic interests are protected and that the public's needs will be addressed beyond the scope of energy policy.

The pipeline project could seek easement across federal lands by exercising rights granted in the Federal Lands Policy Management Act of 1976. That law authorizes the Secretaries of Interior and agriculture to grant rights-of-way over public lands and national forest lands (except wilderness areas) for coal slurry pipelines.

Pursuant to S. 1844, a coal slurry pipeline could cross private and state lands by using federal condemnation powers despite the fact that state has a coal slurry pipeline law. To date, twenty states have enacted laws which, in one form or another, provide a means for acquisition of a route across private and state lands. Though these statutes may differ in many respects, they represent the efforts of state legislatures to protect the interests of their citizens. The views of the Secretary of the Interior make this point so clearly.

In testimony before a House Committee on this last year, David C. Russell, Deputy Assistant Secretary, Land and Water Resources represented DOI's position on States' Rights when he said: ". . . it is ironic that we are making every effort to protect State authority over water while seriously considering diminishing State authority over the disposition of nonfederal lands within their boundaries. Is State authority over land any less worthy of our concern and protection than State authority over water?"

It should not escape this Committee's attention that coal pipelines planned for construction in Eastern states pose problems for rail lines far more impactive than those facing western railroads. In its simplest terms: rail lines in the East run predominantly in a North-South direction in the East; whereas, the Western lines run East and West. Therefore, the Coastream pipelines project stretching 1300 miles from Illinois to Florida cold use the powers granted in this legislation to condemn, not the width of a railroad right-of-way, but its entire length in order to secure a level route through the steep Appalachian Mountain range. If the pipeline sponsors were required to pay the fair market value for the rights to share the roadbed through the mountain passes and tunnels, the cost might prohibit its construction. Given the backup leverage of Federal condemnation of that route, the project could force the railroad to negotiate for a much lower price or face the risk of condemnation proceedings in a Federal District Court. It is a fact that rails offer the levelest road through those mountains and that is what the pipelines are looking for.

Western governors are under no illusions that this legislation provides their states with iron-clad protection of their water rights. Western water law is an art form unto itself. As proposals such as S. 1844 are offered to the Congress, they represent a new variable in the tenuous game of Western water law and all the players must be assured that new Federal laws cannot be used against those states where water protection is a paramount concern.

By now, we are all familiar with the circumstances which brought about the *Sporhase* v. *Nebraska* case, NO. 81-613 (US, argued March 30, 1982). The real significance of that Supreme Court decision, with regard to this legislation, was the finding that water is, in fact, an "article of commerce". Therefore, Nebraska's law prohibiting export of water was found to be an unconstitutional abridgement of the Commerce Clause.

The precedent may have frightening consequences for other Western states which have enacted similar statutes prohibiting export of water. The Nebraska Supreme Court offered this view of water as a commodity: "The term 'commerce' implies that the commodity must be capable of being reduced to private possession and then exchanged for goods or services of the same or similar value. An analysis of Nebraska case law and statutes demonstrated that Nebraska law has never considered groundwater to be a market item freely transferable for value among private parties, and therefore not an article of commerce."

Using the U.S. Supreme Court finding that water is a commodity, it is likely this slurry legislation will create the pressure to overturn laws similar to that of Nebraska.

Wyoming and Montana require legislative consent for an appropriation of water within the state for a beneficial use outside the state. Utah requires the granting of a permit for interstate use of its water. The Yellowstone River Compact requires unanimous approval of Montana, Wyoming and North Dakota for export of water out of the Yellowstone River basin.

Montana State Representative, John Scully, removed any doubt regarding the impossible task of the Congress to protect their states in this legislation. Testifying before a House Committee in 1979—and three years before the *sporhase* decision he said:

"If you look historically to water in the past, you find that water has not been treated as a commodity. It has not been treated as a transportation medium. It has not been treated as an item of interstate commerce. It has been treated as a resource of the state, held in trust of the state, the benefit of its people, and the use thereby"

". . . you are going to change the basic legal structure of water when you change to a coal slurry pipeline system. It will become a transportation system immediately and, thereby, under the direction and control . . . of the Commerce Clause."

"So, if you intend to protect the States' rights to water use, in terms of glossy language in this bill, rest assured you cannot."

In *First Iowa Hydroelectric Cooperative* v *F.P.C.*, 328 U.S. 152 (1946), the Supreme Court held that despite specific provisions in the Federal Water Power Act protecting state laws from being superceded and requiring compliance with state procedures, Iowa's licensing requirements for dam construction and operation were preempted. Reasoning that the Federal government, through the legislation, sought to promote the development of national water sources, the Court significantly restricted the "preservation of states' rights" clause because the state procedures in question frustrated Congress' overall policy objectives.

A coal slurry pipeline case before the U.S. Supreme Court may revolve around the state's need to shut off the pipeline's water supply to protect the economic interests of ranchers in the area. The pipeline sponsors can counter with the argument that the governor may have been within his rights to take the action but its effect was to deny coal for electric generation to millions of utility customers. Given the "National interest" finding required in S. 1844, how could a state's refusal to allow water to be exported in a slurry pipe be considered anything but a frustration of a National need.

With regard to environmental impacts of a coal slurry pipeline, it may be the case that construction of a pipeline will cause less impact upon the land than would construction of a new railroad right-of-way. That is not to say that slurry pipelines are environmentally superior to railroad delivery of coal. Pipelines represent a fixed capacity carrier moving only one commodity in one direction. Whereas, railroads move any and all commodities in all directions with great flexibility in capacity.

One of the more serious environmental impacts of slurry pipeline operation may be the difficulties encountered in the discharge of the slurry wastewater separated from the coal. Not only will the water be supersaturated with fine coal particles, but, heavy metals, trace elements and acid-producing compounds will also be present. Chemical additives used to prevent corrosion in the pipeline and treatment chemicals used to remove fine coal particles from the waste water may require additional treatment which may not be available on a commercial scale such as a 25 to 50 million ton pipeline project might require. Pipelines of that size will utilize between 7 and 14 billion gallons of water annually. Using highly saline water or treated municipal waste water may pose separate problems for waste water disposal.

The only example of treatment of slurry waste water can be observed at the Mohave power plant in Bullhead City, Nevada but this offers no assurance that treatment technology is sufficiently developed and available at this time. Instead of treating the contaminated water, it is piped into settling ponds 130 acres in size and ten feet deep. Because land costs are low and water evaporation rates so high at the plant site, the utility can afford to expand the settling ponds to accommodate additional water. This treatment scheme has no application in the humid environment of the Southeast.

When questioned about the wastewater treatment technology available to the proposed coal slurry pipeline projects, the sponsors respond that they will design the pipelines to meet any water discharge standards. We hear it this way:

"Let the Environmental Protection Agency set the standards for water discharge our pipeline must operate under. We'll design the pipeline to operate in compliance. Then, we'll build and operate the line. If our treatment technology does not work or is too expensive, we'll come into the EPA and request a variance from those standards. Or, we'll wait to see if the federal government dares to shut us down."

States have been enacting a variety of environmental protection laws over the past decade, many of which are modeled after similar federal legislation, some of which exceed their federal counterpart in degree of enforcement. S. 1844 could preempt any of these laws if it is found they pose a barrier to the construction and operation of the pipeline. Also, laws governing planning, zoning, commercial and industrial land use, worker health and safety may be subject to preemption under this bill. In summary, a federal eminent domain law for coal slurry pipelines would cut broadly into the ability of states to protect their environment, regulate their land use, resource development and the health and wellbeing of their citizens.

The granting of federal eminent domain powers to coal slurry pipelines is unnecessary and provokes new problems for states at a time in history when the federal government is trying to return many powers and responsibilities to those same states. We urge this Committee to play an active role in defeating S. 1844 if it comes before the Senate this year.

Senator DANFORTH. That concludes the hearing.

[Whereupon, at 12:20 p.m. the hearing was concluded.]

ADDITIONAL ARTICLES, LETTERS, AND STATEMENTS

STATEMENT OF REESE H. TAYLOR, JR., CHAIRMAN, INTERSTATE COMMERCE COMMISSION

Mr. Chairman and Members of the Subcommittee: The Commission has testified a number of times over the past several years on the subject of coal slurry pipelines. Most recently, on May 10, 1982, we submitted comments to the Senate Committee on Energy and Natural Resources. Those comments related to S. 1844, the Coal Distribution and Utilization Act of 1982, and the legislation favorably reported by the House Committee on Public Works and Transportation, H.R. 4230.

In addition, on December 9, 1981, the Commission testified on H.R. 4230, the "Coal Pipeline Act of 1981," before the Surface Transportation Subcommittee of the House Committee on Public Works and Transportation. We also testified on that legislation before the House Committee on Interior and Insular Affairs on November 17, 1981.

The purpose of S. 1844 is to facilitate the development of interstate coal pipeline distribution systems by granting the Federal power of eminent domain to those interstate coal pipeline distribution systems that are determined to be in the national interest. The bill would give authority to the Secretary of Energy to determine whether the construction of a pipeline is in the national interest. Once such a determination is made, a person proposing to build a coal pipeline distribution system could then acquire rights-of-way over private lands by exercising the Federal power of eminent domain. If an interstate coal pipeline is constructed, it would be regulated by the Interstate Commerce Commission under existing law.

As you know, the question of coal slurry pipelines involves a complex set of issues—including land management, environmental concerns, water rights, and transportation. In deciding whether the Federal government should provide certain economic interests with the substantial right of eminent domain, Congress must address and balance all of these concerns. In this regard, we note that the applicability of State water law was a major focus of the Energy Committee, and that the bill now under consideration by the Commerce Committee provides for the primacy of State water law.

We are aware of the Administration's position that the Federal power of eminent domain should not be given to coal slurry pipelines at this time, and it is the Commission's view that Congress will have to make the ultimate decision on the important policy questions raised by the legislation. It is, of course, the transportation issues relating to coal pipeline development that are of concern to the Commission, as well as this Subcommittee. Should Congress decide to grant the right of eminent domain to coal pipeline operators, we believe those issues are best resolved by adopting the approach of H.R. 4230 which would give the Commission the authority, after making specified findings, to issue a certificate for construction or extension of a coal pipeline. In contrast, S. 1844 would give authority to the Secretary of Energy to determine whether the construction of a pipeline is in the national interest. Because we believe that transportation issues must be considered in any process involving eminent domain for coal pipelines, we prefer the position taken in H.R. 4230 to that of S. 1844.

The responsibility for granting the right of eminent domain to coal pipelines requires a careful balancing of competing interests in order to ensure that the proposed service will further the goals of the national transportation policy. Although we do not presently regulate the entry of coal slurry pipelines, we believe we do have the expertise and experience required to determine whether the use of the Federal power of eminent domain should be granted in a certification process. We would point out that the required findings in S. 1844 include several matters relating to coal transportation issues. Also, as indicated above, various aspects of coal pipeline operations, such as rates, are already subject to Commission regulation.

In addition to our jurisdiction over rates, existing law imposes a common carrier obligation on coal slurry pipeline operators. In essence, this obligation requires a common carrier to provide transportation or service upon reasonable request and in a nondiscriminatory manner. It is our understanding that, due to the size of the capital investment involved, uninterruptible long-term contracts may be essential in order to obtain financing to construct a slurry pipeline. This might be construed to conflict with the common carrier obligation, particularly if the contracts are for the entire capacity of the pipeline.

S. 1844 does not address this issue. Practically speaking then, enactment of S. 1844, without some clarification of the contract and common carrier obligation issues, probably would not achieve its intended purpose of encouraging the construction of coal slurry pipelines, as set forth in section 2 of the bill. We believe that, if S. 1844 is to be enacted, regardless of which agency makes the underlying determination enabling a pipeline to use the Federal power of eminent domain, a provision addressing the common carrier obligation vis-a-vis contract rates is necessary. The Commission and its staff stand ready to provide assistance, if you desire to add such a provision.

We would also like to point out that a major concern raised regarding coal pipeline development is the possible impact on rail carriers, because coal slurry is a significant source of potential competition for an important portion of rail traffic. Fair and effective competition would be enhanced, in our view, by Commission regulation of both coal pipelines and the railroads as proposed in H.R. 4230.

Finally, we should note that significant resources would be expended for administrative and other costs incurred in processing a request for the use of the Federal power of eminent domain, particularly for environmental studies. H.R. 4230 contains a provision requiring applicant to reimburse the agency for such costs. As drafted, however, the funds would go to the Federal Treasury, a result which appears contrary to the intent of the provision. We believe it appropriate, if the Senate concludes that applicant should pay the administrative costs, that reimbursement be made to the agency involved. This could be accomplished by language similar to that set forth in the appendix, specifying that a special account would be established for reimbursement funds, which are authorized to be appropriated until expended.

In conclusion, the Commission takes no position on whether the right of Federal eminent domain should be granted to coal slurry pipeline operators. With regard to the transportation issues involved, if the Congress believes Federal eminent domain should be provided, the Commission believes the ICC is the appropriate agency to be given authority under the legislation.

DRAFT LANGUAGE—SECTION 4, NEW SUBSECTION (h).

Sec. 4. Insert the following new subsection (h) and redesignate subsections (h) and (i) as subsections (i) and (j) respectively:

"(h)(1) Each person proposing to construct an interstate coal pipeline distribution system who has filed an application under this section shall reimburse the [Commission or Secretary] for admininstrative and other costs incurred by the agency in processing the application in such manner as shall be prescribed by regulation.

"(2) The [Commission or Secretary] is authorized to require a deposit of any payments under paragraph (1) of this subsection intended to reimburse the United States for administrative and other costs with respect to any application filed under this section. The moneys received for administrative and other costs under this subsection shall be deposited with the Treasury in a special account and are hereby authorized to be appropriated and made available until expended.

"(3) As used in this subsection, "administrative and other costs" include, but are not limited to, the costs of special studies, environmental impact statements, or other special activities.

STATEMENT OF HARRIETT WOODS

State Senator Harriett Woods, Democratic candidate for the United States Senate, regrets very much that Senator John Danforth refused her request to testify before this Senate sub-committee.

The Congressman from the Sixth District of Missouri held similar hearings in this region this past March. Senator Danforth's repetition of these hearings some six months later and only a month and a half prior to the general election is an obvious attempt to gain political advantage with an issue that is of serious concern to many Missourians. Senator Danforth has been in the United States Senate for almost six years and this is one of only a handful of hearings that he has held in this part of Missouri.

Attached is Senator Woods' position on this issue which she would have presented had she been allowed to appear. Also attached is a copy of a concurrent resolution passed last session by the Missouri Senate, with her vote. The thoughtful position paper and the resolution reflect her longstanding concern on this issue.

Senator Woods' statement proposes creation of a multi-state compact with real authority to control arbitrary water diversions and urges federal action in the meantime to forestall any such water grabs until the compact agreements are in place.

MISSOURI RIVER DIVERSION

In September 1981, the state of South Dakota announced that it planned to sell Missouri River water to Energy Transportation Systems, Inc. (ETSI). ETSI plans to divert up to 50,000 acre feet from the Oahe Reservoir, in South Dakota, to Gillette, Wyoming. The water will be used to move coal through a slurry pipeline to Baton Rouge, Louisiana, for export and for power generation in the southern United States.

I oppose this diversion of Missouri River water. It establishes a dangerous precedent at a time when the demand for water in the upper midwest is growing. There are several other proposals to use Missouri River water for energy development projects in Colorado and Wyoming. There are also plans to use Missouri River water to compensate for the depletion of the Ogallala Aquifer—the major source of water for irrigation and domestic use in six states west of Missouri. Preliminary plans call for the diversion of up to 8.5 million acre feet annually for this purpose. In fact, planned projects could reduce the annual flow of the river through the state of Missouri by as much as 32 percent

The State must resist upstream plans to use large quantities of Missouri River water. This river serves our State in a variety of ways. It provides 60 percent of Missouri's inhabitants with drinking water. A significant reduction of the volume of water, especially in the dry summer months, could threaten the ability of Missouri's cities to draw water from the river. Further, safe standards for the discharge of industrial and municipal waste requires a minimum river flow. Diversion of water at critical periods could lead to a violation of these standards and a threat to public health. Reduction of the water flow would also harm Missouri's economy by reducing the barge navigation season. Finally, these proposals would destroy fish and wildlife habitat.

There is every indication that the U.S. Bureau of Reclamation, the state of South Dakota and ETSI have proceeded with the coal slurry project without considering its implications for those downstream. More serious further extensive withdrawals of river water are also being planned without adequate consideration of the effects of water withdrawal on downstream states. It is time that their concerns were considered.

This sale establishes a dangerous precedent for the future. The sale, in itself, does not represent a major diversion of the Missouri River resource; but it is the first treansfer of water out of the Missouri River Basin. Water problems within the basin are already serious enough. The region must carefully consider the complications posed by out-of-basin transfers.

The current problem is not new. In 1944, President Roosevelt asked Congress to create an authority to develop the Missouri River Basin. In his accompanying letter, Roosevelt wrote that the waters of the basin form one river and one problem requiring a comprehensive rather than piecemeal solution.

Unfortunately, the approach has been piecemeal. In the early years, the focus was almost exclusively upon flood control. Recently, profligate water consumption in the plains states has generated interest in water diversion projects such as those outlined above. The attitude of the current administration only worsens the problems posed by the piecemeal approach. Indeed, the Reagan administration recently eliminated funding for the Missouri River Basin Commission—a Commission designed to foster cooperative water use within the basin.

As we look to the use of the Missouri River, several conclusions are evident. First, the national mood is to turn such problems back to state and local control. This "new federalism" is going to require a new sense of partnership among the states. Second there will be sharp competition among different states within the basin for different water needs. These needs include:

Water for irrigation.

Water for pipelines to carry coal from the West to the South and East.

Water for the synthetic fuel industry which will develop over the next twenty years.

Water for residential and industrial use. Population in the basin states tends to cluster around the water resources.

Water for navigation to transport agricultural commodities and with the depletion of the Ogallala Aquifer, the Missouri River is becoming an increasingly attractive alternate water source.

In 1982, we still need a comprehensive solution to the problems of the Missouri River Basin. We can hardly wait another thirty-eight years. For this reason, I urge the ten states in the basin to form a compact to provide a fair and equitable distribution of Missouri River water.

The compact process is an excellent means for states to resolve interstate issues. It is a negotiated agreement which is approved by the legislatures of each state and then ratified by Congress as being consistent with national purpose. There have been studies of basin resources and basin needs but the issues that are evident have not been resolved. The issues which must be resolved through the compact process are:

A river management plan which provides the optimum use of this resource.

Priorities for water use.

Rates and conditions for major water sales for irrigation and industrial purposes to areas outside the basin.

Allocation of income generated by the sale of water equitably among the states.

Minimum flow requirements for the river and its major tributaries.

Development of a plan to conserve and preserve this valuable resource through better use practices.

In order to initiate this compact process, the governors of the basin states must agree to serious negotiations with a firm timetable to resolve these issues.

STATEMENT OF MINING AND RECLAMATION COUNCIL OF AMERICA

The Mining and Reclamation Council of America (MARC) is a national coal association representing over 300 domestic members who accounted for approximately 70 percent of our nation's coal production last year. MARC's membership is diversified by company size, geographic location, and methods of operation. Many of MARC's members are small to medium sized independent producers who mine coal by both deep and surface methods and are located throughout the coal producing regions of the United States. MARC strongly supports coal slurry legislation as S. 1844 because it will give coal producers a competitive alternative for moving coal more economically to market.

MARC has supported the establishment of the right of federal eminent domain for coal slurry pipeline since its formation and is a founding member of the Alliance for Coal and Competitive Transportation (ACCT). As a member, we endorse the testimony submitted by the ACCT panel.

MARC supports coal slurry legislation for several specific reasons.

Competition.—The coal industry is in dire need of alternatives for the movement of coal from mine to market. Most coal is captive to the railroads, often one carrier, for shipment because there are no navigable waterways available for barge transport and transport by truck is not economically viable for longer hauls. The railroads have recently been able to raise rates dramatically as a consequence of the limited protection available to coal shippers through the ICC following the recent enactment of the Staggers Rail Act of 1980. The threat of, and hopefully, competition from coal slurry pipelines are the only direct marketplace constraints on rail rates for most coal shipments. In the absence of regulation there must be competition.

Federal eminent domain is necessary.—This legislation is essential for the construction of coal slurry pipelines. In the East, railroads own their land in fee-simple and will not permit competition to cross them. For example, if the largest of the planned lines is built in the East it would have to cross railroad lines at approximately 175 points. In the West, eminent domain is necessary to avoid the substantial expense of a multitude of lawsuits in crossing under rail lines as has been experienced by the ETSI pipeline project.

The federal Constitution contains an interstate commerce clause. The coal slurry legislation applies only to interstate pipelines. Unless Congress wishes to repeal the interstate commerce clause, federal action is necessary and appropriate for this competitive transportation mode to be economically available. The Congress has a responsibility to provide for the general welfare of the citizens and to foster interstate commerce. Coal slurry legislation is consistent with fulfillment of those obligations.

Equity.—This legislation is only fair. All the major transportation systems in the United States received the right of federal eminent domain when they needed it including: railroads, interstate highways, and oil and gas pipelines.

Cost savings.—Coal slurry pipelines are economical. Consumers could save billions of dollars in their utility bills, and no taxpayer funds will be used to construct or operate any pipelines.

Some of the opponents of coal slurry pipelines have alleged that smaller and medium sized independent coal producers will not benefit from the construction of coal slurry pipelines. This is wrong. Smaller producers can and will benefit from the construction of coal slurry pipelines.

An understanding of the marketing of coal via pipelines is basic to this point. Some opponents have suggested that coal pipeline companies will be in the business of marketing coal and will seek contracts between utilities and larger producers. This is not correct. Coal pipeline companies will not purchase or sell the coal. The traditional methods of marketing will prevail. Utilities will continue to negotiate directly with coal producers, whether large or small on the quantity, quality and price of the coal to be purchased. The pipeline company will have preparation plants throughout the coal fields that will crush and wash the coal. The producer will then ship the coal to the nearest of these plants via rail, water, truck or pipeline—whichever is the most economic—for shipment to the consumer.

The advantages of coal slurry pipelines to the small and independent producer are three fold:

1. New Markets.—Many smaller producers that do not have a range of quality of coal are limited in the utilities they can sell to. For example, much of the Appalachian high sulphur coal has been excluded from the market. The coal pipelines can blend and batch various qualities to get the right mix. The pipelines will make new markets available to small limited quality producers and afford them a chance to blend their coal with others.

2. Washing facilities.—Many small producers lose markets for coal because of their inability to wash it. Preparation plants cost a good deal of money. Pipeline companies will provide access to all producers to these plants. Therefore, pipeline companies will give the smaller producers without preparation plants an advantage they do not have now.

3. Equal rates.—Smaller producers often are precluded from markets because of their inability to take advantage of volume discount rates given by railroads. The railroads have established unit train rates for volume shipments. This gives the large producer an advantage. Large and small customers will have equal access to pipelines at equal rates.

MARC supports this legislation primarily because it will help all coal producers—large and small. It will provide desperately needed competition in rates for transportation. It will open up new markets for many producers. As outlined by others testifying on behalf of ACCT, coal slurry legislation will also benefit utilities, labor, consumers and all citizens through helping to strengthen our domestic energy industry.

STATEMENT OF RICHARD J. GRANT, MANAGER OF ENVIRONMENTAL AFFAIRS, CENTRAL ILLINOIS PUBLIC SERVICE CO.

Mr. Chairman and members of the Subcommittee, I am Richard J. Grant, Manager of Environmental Affairs for Central Illinois Public Service Company. Central Illinois Public Service Company is a publicly owned utility providing electricity and gas for communities and rural areas throughout central and southern Illinois. Approximately 99 percent of the electricity we supply is generated by coal and about 95 percent of the coal we burn is mined in southern Illinois. In addition, seven percent of the electricity we generate is used by the coal mining industry in southern Illinois. Obviously, we would like to see greater demand for our electricity. Thus, the well-being of Central Illinois Public Service Company is associated with the fortunes of the southern Illinois coal industry. We are submitting this statement in support of the enactment of S. 1844, the Coal Distribution and Utilization Act of 1982.

As we may be aware, Mr. Chairman, the coal mined in southern Illinois contains a relatively high percentage of sulfur and is, therefore, considered to be of relatively low quality by many potential buyers. On the other hand, southern Illinois coal compensates for its high sulfur content by being relatively inexpensive to mine and by containing high amounts of heat. These advantages and disadvantages must translate into a competitive price at the burner tip if our coal is to be marketable.

Unfortunately, the advantages we have are being lost today due to the high cost of transporting coal to the markets. For all practical purposes, the only existing means of transporting coal long distances is by rail. The prohibitive and ever increasing tariffs currently charged by the railroads prevent coal mined in Illinois and other states from being competitive in distant markets. For instance, one of the emerging markets for southern Illinois coal is the utility market in Georgia and Florida. However, southern Illinois coal must compete there with coal from the Appalachian Basin and such foreign sources as Poland, South Africa, Colombia and other South American nations. Several utilities in Georgia and Florida have actually found it cheaper to purchase coal from Poland and South Africa than to purchase American coal. I'm sure you will agree that a state of affairs is as bad for the national economy and our balance of payments as it is for the southern Illinois coal industry.

The existence of an economical, alternative means of transporting coal would inject an essential element of competition into the coal transportation market. We at Central Illinois Public Service Company believe that coal slurry pipelines pose such an alternative. If legislation is adopted that assures pipeline companies of obtaining rights-of-way, then these companies will respond to market conditions and begin to develop interstate coal pipelines. The market will determine whether any, most, or all of these pipelines are built. However, we are convinced both that some pipelines will be developed and that their development will provide competition which results in lower coal haulage rates and longer coal haulage contracts. For this reason, we urge you to support S. 1844, the Coal Distribution and Utilization Act of 1982.

In its present form, S. 1844 balances the many interests that should be accommodated in federal legislation of this sort. The key provision is, of course, the grant of the power of eminent domain to those interstate coal pipelines that are shown to be in the national interest. In the past, access to eminent domain authority has been granted both the federal and state governments to railroads, pipelines and other modes of transportation during their formative stages. It seems only just that access to that power should now be granted to interstate coal pipelines by the Federal Government.

The legislation that has been reported by the Senate Energy and Natural Resources Committee contains significant safeguards for both the environment and property owners. Section 5 of S. 1844, as well as other provisions of the bill, provides that any pipeline, whether or not it exercises Federal eminent domain authority, must obtain water from the states in accordance with terms and conditions imposed by the states. Sections 5 and 7 assure that state laws concerning the construction, maintenance, and operation of interstate coal pipelines, including those concerning the disposal of water, are not preempted by S. 1844. Section 8 assures that S. 1844 neither expands nor limits the ratemaking authority of either the utility regulatory agency of each state or the Federal Energy Regulatory Commission. With these legal safeguards and the present state of slurry technology, we believe interstate coal pipelines can and will be developed in an environmentally sound manner.

In summary, Mr. Chairman, Central Illinois Public Service Company enthusiastically endorses S. 1844. We believe it offers a well-rounded solution to the legal issues raised by interstate coal slurry pipelines. We encourage you, the members of your commitee and the members of the Senate to adpot this legislation at the earliest possible time.

STATEMENT OF ROBERT A. HARVEY, REPRESENTING NEBRASKA STATE LEGISLATIVE BOARD, BROTHERHOOD OF LOCOMOTIVE ENGINEERS

Members and Staff of the Surface Transportation Subcommittee, I will try to keep my remarks brief and within the confines of coal slurry economics and water issues.

Let me begin by presenting my perspective. I am a Locomotive Engineer representing approximately 1000 engineers from the State of Nebraska, who for the past ten years have been the prime mover of coal from the Powder River Basin in Wyoming to points east and south. Nearly one-half of those engineers are working because of coal business.

On the division where I am employed there are 225 engineers working today where ten years ago there were 50. Approximately 2000 railroad jobs exist now where there were 350 a decade ago. The growth has stopped due to efficiencies of operation and employment has actually decreased indicating a capacity to handle even more tonnage than at present. We are concerned about keeping our jobs.

The Office of Technology Assessment has estimated that the construction of just five of the thirteen proposed coal slurry pipelines would, by 1985, result in the loss of 12,000 railroad jobs. It has been projected that the passage of this legislation could mean the loss of 41,000 permanent railroad jobs. According to the Department of Labor, those railroad jobs are in the intermediate to high income level and the people who hold them spend one-fourth of their income on housing, one-fifth for food, one-fifth on taxes and the remainder on clothing, automobiles, medicine, insurance, recreation and education. Now those railroad jobs are considered basic industry so the earnings get passed around to create a good many other jobs. With present unemployment near 10 percent, double that of 10 years ago, a further reduction in employment in a basic industry would be hard to justify.

Coal slurry pipeline proponents diminish any argument of job losses and actually tell some groups they will create new jobs. At the same time they state, and I might add, hinge their reason for being on the premise that they will reduce transportation costs because they require very little labor. Granted, some new jobs would be created, although temporary and highly mobile, but in the case of one pipeline, final permanent employment would amount to fewer than 800 jobs at a loss of over 4000 good paying, permanent railroad jobs. I would not want to suggest that there exists a relationship in the amount of coal transported and a fixed number of employees, but that the number of employees could actually decrease with increased efficiency. In fact, recent developments in rail technology, implementation of proven practices and systems, changes in law and labor practices, and the promise of new technology will improve an already highly productive industry.

I note that most of the statements which have been made justifying the need for this legislation indicate that the consumer will benefit.

The slurry proponents say that consumers will benefit as a result of lower transportation costs, not necessarily from the beginning of coal delivery, but some future time when apparently inflation and its effects on rail labor and fuel costs will drive up the price that railroads must charge. Apparently those operating costs that are subject to inflation represent only 30 percent of coal slurries total costs and over 50 percent of railroads cost. The assumption that the consumer will benefit as a result of this "you-can-count-on-it" inflation, coupled with the fact that pipelines have a really poor track record for costing what they are projected, makes this consumer pretty nervous. Consider the cost estimates of one slurry pipeline that has gone from $850 million to $3.5 billion in five years. Consider also the Alyeska pipeline that was first estimated at $800 million and ended up costing $9 billion. I am lacking in the faith that is required to accept these claims of future lower utility bills, especially in light of the fact, that the Cabinet Council on Natural Resources and Energy found that transportation rates will not directly affect coal prices to users. Coal will sell at the highest price possible, subject to competition from other fuels in the end-use markets. If transportation rates drop, it will simply increase the return to owners of coal mines. Another frequent statement is that head-to-head competition will lower costs to the utilities. Competition already exists. Fierce competition between railroads has always existed and is likely to be very intense in the near future with other roads, all but started, in the Powder River Basin. Competition between different fuels and sources of supply work to keep costs down. Other transport modes, bargelines and trucks create competition. The fact of the matter is, that slurry lines once built will lock out any other competition. This maneuver is achieved through "take or pay" contracts. The consumer, through the utility, will be obligated to pay for the cost of those slurry pipelines regardless of final cost or success. This seems to me to be a far cry from the rules of free enterprise and unfettered competition.

I understand the problem of coal slurry promoters in not having a long haul line in place to prove their technology and economic claims, but I can not visualize the Federal Government subsidizing them any further, especially at the expense of private land owners, the existing transportation system, and pre-emption of the States right to provide Eminent Domain. The potential costs to the general public, if this legislation should pass, is far greater than any potential gain. The maintenance of a rail system that has been constructed for coal traffic and the subsequent loss of that traffic to slurry lines will require more revenue from each unit of traffic. The railroad, being a common carrier, will still have to provide service to the public and at greater cost as a result of this loss of coal hauling revenue. The worst case might turn a healthy rail system into a bankrupt one.

Another economic consideration that will ultimately affect the public is that coal slurry pipelines will actually increase demand on the energy supply for their operation. A recent Congressional Budget Office report and a good many other studies have supported the fact that railroad unit trains are more energy efficient than estimates for slurry pipelines—in fact, 43 percent more efficient.

Other economic considerations which I will briefly describe and leave to experts to address more completely encompass environmental questions of ruptures, cleanup costs, loss of agricultural land (particularly fragile grazing land in the west), cost of cleaning of slurry water or the costs associated with pollution of our rivers and streams.

If these problems were not enough to convince members of Congress of the unworthiness of the proposal, surely the problem of using water to transport coal would be. I can say very little on the subject that has not already been or will be said. The next resource crisis this nation will face, we are told, will be availability of clean potable water. One drop of it used in a slurry line is one less drop for mankind. No matter how you cut it, it is a waste of an essential resource for a temporary economic gain for a few.

Thank you.

Statement of Leland R. Nicholson, the Kansas Power & Light Co.

Mr. Chairman and Members of the Committee: My name is Lee Nicholson, Executive Vice President for The Kansas Power and Light Company. My Company provides electric energy to more than one million Kansans, including customers of rural electric cooperatives, municipally-owned electric utilities and other electric companies who buy power from KPL's coal-fired plants.

KPL uses coal as the fuel for nearly 90 percent of the electricity produced in its plants. This represents major conversion of our production system. Less than eight years ago, gas or oil were used for nearly 90 percent of our production.

The switchover to coal as our primary fuel has not come easily. When the third 680-megawatt unit of our Jeffrey Energy Center comes on line next year, the total investment in that plant will exceed one billion dollars. That is approximately three times the total investment in electric facilities of this Company just 10 years ago.

All this was done under mandate of the federal government because it was thought to be in the national interest, and in the best interest of our customers, to reduce the use of natural gas and oil as power plant fuel.

The Jeffrey Energy Center, next year, will become the largest facility for the production of electricity in Kansas. One of the principal factors in the selection of plant site was the proximity of the rail line for the delivery of coal.

We have a contract with the AMAX Coal Company for the supply of a good quality coal, at very favorable prices, through the year 2013. We had a favorable railroad arrangement for delivery of that coal, until passage of the Staggers Act.

Since that time, the Burlington & Northern Railroad has taken a number of actions to increase the cost of shipping coal to KPL. The Staggers Act and recent ruling by a federal district court in Kansas City allowed B&N to increase their charges by 75 cents a ton—about three and three-fourths million dollars a year, based on current anticipated deliveries. With the addition of the third unit next year, that amount should increase by about 50 percent.

As you know, the very basis of utility regulation provides that the Company will recover such operating costs through rates. And the higher electric rates paid by Kansans will be for the benefit of the B&N Railroad, who has an absolute monopoly as the shipper of origin for all coal shipped from the vast Powder River Basin in Wyoming..

All of this gets to the point: if railroads no longer are to be regulated, then competition must exist. And, slurry pipelines offer one alternative to the consuming public to skyrocketing freight rates we can expect railroads to charge captive customers, like electric utilities.

Therefore, we heartly endorse S. 1844, and encourage its passage to remove one obstacle which has deterred construction of coal slurry pipelines for too long.

Today, The Kansas Power and Light Company relies totally on railroads for delivery of coal to its three largest plants, including the previously mentioned Jeffrey Energy Center. That is because we have had no choice.

The railroads have had an intensive anti-pipeline lobbying effort going on in Kansas and other neighboring states for a number of years. To the extent the pipeline builders have not been able to acquire right-of-way, the railroads have been successful.

The future of our nation depends upon increased availability of coal for power plant fuel and other industrial uses. And, the American people deserve abundant energy resources at the lowest cost modern technology can make possible.

Coal slurry pipelines can help keep energy costs lower, while increasing delivery capability of our nation's transportation system.

One objection we have heard to granting power of eminent domain to the builders of proposed pipelines is that they may cross an entire state without serving anyone in the state. That argument is based upon current state-of-the art. There is no coal pipeline in Kansas. Should there be one at some time in the near future, its use certainly would be a consideration by KPL for our existing and future power plants.

Unregulated railroads should not be allowed to continue to block construction of coal slurry pipelines. We believe the passage of S. 1844 is in the best interest of the electric rate payers of Kansas, as well as the general national interest.

We urge passage of S. 1844.

Thank you. I would be happy to respond to any questions you may have.

STATEMENT OF JACK A. MCGLOTHLIN, DIRECTOR, KANSAS STATE LEGISLATIVE BOARD, UNITED TRANSPORTATION UNION

Chairman Danforth and Members of the Committee, my name is Jack A. McGlothlin. I an Kansas State Legislative Director for the United Transportation Union, representing approximately 5,000 working railroad men and women and their families; also representing some 6,000 retired railroad men and women and their families. I have prepared this written statement to present the views of my organization on coal slurry pipelines and their effect on the Transportation system, the economy and the important ecological issue of water.

Railway labor is strongly opposed to the enactment of any coal slurry legislation. Our major reasons for such opposition are the facts that coal pipelines would cut heavily into railroad transportation and cause substantial reductions in railroad employment at a time when railroad employment already is depressed to a point beyond that of the depression years, causing a near crisis to the Railroad Retirment Fund, a drain on local and national social services, catastrophes in communities' economies and erosion of the industry's ability to serve the American people as regulated common carriers—required to transport freight from shippers, large and small, to consumers, regardless of size or geographical location. The fact that water is an exhaustible resource—one that man cannot live without and the jeopardy that use of potable water for coal slurry pipelines is proposed—is definitely against the public interest and welfare.

The proposed coal slurry pipelines (August-September 1982 issue of The Power Line shows a proposed coal slurry pipeline network of 9 pipelines—and there are several proposed U.S.-Canada ones also, as well as Northeast corridor proposed pipelines that are separate for a total proposal of 15) all of which would be private carriers.

Thus advantaged by the proposed power of eminent domain, they would direct their efforts at capturing and holding, through monopolistic long-term contracts, the most profitable long-haul, high-volume coal traffic, traffic traditionally transported by this nation's railroads. It is our conviction that the issuing of the power of eminent domain, constitutes congressional support and encouragement for the building of coal slurry pipelines. This would not be in the public interest and it would be detrimental to the economy of the whole of the United States, especially to an important part of United States National Security—the railroad industry.

Not all mines and utility companies will have access to the pipelines, therefore there can be no competition (one of the major thrusts of the coal pipeline company's campaign for eminent domain rights is that the railroads offer a no-competition, no-alternative situation for coal companies—a point which we strongly refute) between the two modes of transportation, Railroads serve all shippers. The pipelines would be very selective in their choice of customers, and would have a virtual monopoly of coal traffic with any utility with which they contract to serve. The railroads would be unable to compete for traffic to that utility—because contracts are usually signed for a period of 20-25 years for 10 million or more of coal per year.

Coal slurry pipeline companies also assert that the cost of coal transportation with a pipeline could be less expensive than the delivery of coal by rail. We wish to refute this. The cost of transporting coal by rail from Gillette, Wyoming to Pryor, Oklahoma, today (November 1981) is $11-12 per ton. If the coal slurry pipeline that Energy Transportation Systems, Inc. proposes was built today, at their estimated cost of $2 billion, ETSI would have to charge $16 per ton just to retire the debt in thirty years—$24 per ton if the project ended up costing $3 billion—at today's interest rates. This does not take into account power companies' costs, ETSI professional and maintenance costs—or allow for the costs of failures of the line.

A railroad is like any other business to the extent that when they lose business and do not make a profit, they will cut employment and services. Railroads paid Kansas taxes of $13,600,000 in 1978 and had a Kansas payroll for railroad employees of about $250,000,000 in 1979. The economic impact on U.S. railroads by the proposed coal slurry pipelines would be a devastating blow which would result in an employment cutback to all classes of railroad employees which our states and national economies, and our citizenry can not absorb. The loss to employment, payrolls, incomes taxes, ad valorem taxes, etc., would be monumental. In the midst of a recession and inflation, for our nation, even to chance this for the purpose of promoting the self-serving designs of private parties is ludicrous to say the least. Railroad unemployment figures have been increasing since February 1975. The economic impact makes the benefits alleged by the pipeline purveyors pale by comparison. In fact, it is doubtful the pipeline contributions to the states would pay the unemployment compensation and/or the workmen's compensation benefits inherent in the proposal.

The reduction or curtailment of railroad's hauling their number one bulk commodity (5,706,000 carloads in 1980—5,256,000 carloads in 1979—almost 25 percent of all rail freight), COAL, will result in a domino effect which will bring a drastic increase in freight rates for the other commodities, grain, minerals, feeds, piggybacks, etc. Any substantial diversion of coal traffic from the railroads (and ETSI's proposed 37.4 MMTA per year is substantial) will further erode the industry's ability to serve the American people as regulated common carriers required to transport freight tendered by shippers, large or small to consumers, regardless of size or geographical location, and especially to the extent that railroad branch lines will be abandoned as an economic savings to the beleaguered railroads. We contend that ETSI (and other coal slurry pipeline proposers) are exploiting a special coal marketing situation—demanding the U.S. Government to share in this exploitation.

Railroads are a flexible means of transportation. Coal slurry pipelines will only carry coal—and the cost of their operation will be borne by coal consumers only. This means that anyone who uses energy in the form of coal-produced electricity will bear the cost of building this pipeline—the cost will be added to their utility bills as "power source conversion cost". Nuclear energy was ballyhooed as the economic savior relative to electric energy costs. We now know what a fallacy that turned out to be. In Kansas, we are now being told that when the Wolf Creek Nuclear Power Station goes on line, our electric bills will jump a whopping 60 percent. The proponents of nuclear power told the same persuasive tale that the coal slurry proponents are telling now.

Our coal slurry pipeline research and past experience in many, many hearings before the Kansas Legislature shows that the delivery price of slurried coal to the receiving power plants will not be less than rail delivered coal.

In considering coal slurry economics, it is imperative that the entire economic picture be considered. When this is done, the alleged economic benefits of coal slurry, even if true, do not offset the economical loss to our vital national rail transportation system and would bring about a transportation monopoly between the originating mines, the receiving power plants and the sea ports for overseas shipments.

These and other similar matters must be properly addressed before a true economic evaluation can be made.

In Kansas and the High Plains of the Midwest, the matter of water has become the paramount consideration of every "water-use" proposal. The world's largest aquifer, the Ogallalla Aquifer, is being depleted at such a rapid rate that more than 5 million acres of land will be lost to irrigation by the year 2020.

The shortest and cheapest water importation route proposed to the northern high plans of Nebraska, Colorado and Kansas would cost the taxpayers at least $11.8 billion (1982 dollars), slightly more than the cost of the nation's entire food stamp program last year.

The water draft for the necessary aquaduct would come from the Missouri River and curtail industrial and recreational use in such river centers as Kansas City and St. Louis, Missouri. Other water routes to the south would cost $21 billion (1982 dollars) and entail many ecological problems.

The legislation before Congress, S. 1844 and H.R. 4230, appears to address only the proposed 1,664 mile ETSI coal slurry pipeline. ETSI alone plans to pump 6,517,020,000 gallons of water per year from the Oahe Reservoir in South Dakota (at the headwaters of the Missouri River), aquaduct it to Gillette, Wyoming, and pipeline it to the Gulf of Mexico. As the ETSI pipeline is only one of 15 proposed, future interbasin transfers of large quantities of water will have a far-reaching affect and siphon off as much as 10 million acre feet per year—nearly half the annual flow of the Missouri river at Sioux City, Iowa. If this siphon-off is permitted, how much water would be left by the time the river reaches St. Louis? It stands to reason that the adverse effect upon of the Missouri's contribution to the Mississippi could have a devastating effect upon our nation's largest river. For Congress to establish or allow a precedent of this type, with its far-reaching ramifications, is unthinkable.

In a matter as complex as this proposal and one with all of the ramifications it poses, a clear cut choice is evident. Congress must decide whether they will use rapidly dwindling irreplaceable water resources for use in a speculative, unnecessary form of monopolistic transportation or whether they shall conserve that water for food and fiber production for present and future generations of Americans—and the World. Our past record with oil, clean air and other precious minerals does not show we have an inclination to learn from the past. In those instances we have had a measure of success in improving with synthetics and substitutes. Uppermost in the minds of Congressmen and Senators should be one indisputable fact: Coal may be a substitute for oil, however, at this point in time technology has yet to replace water.

It is a known fact that rail transportation is the most public serving, energy conserving and the least ecologically disturbing form of transportation known. Coal slurry pipelines are not needed, are environmentally unsound, represent a special interest and will bring about an inflexible use of precious water and energy.

If it is the intent and purpose of the U.S. Congress to cripple, beyond repair, an already financially ailing rail transportation system, so vital to the nation's defense and economic well-being, and to jeopardize a fragile major water supply, their approval of S. 1844 and H.R. 4230 will surely accomplish that end.

STATEMENT OF JOSEPH S. SPIVEY, PRESIDENT, ILLINOIS COAL ASSOCIATION

Mr. Chairman, my name is Joseph Spivey and I am President of the Illinois Coal Association, the members of which produce 98 percent of the coal mined in Illinois. Those companies are expected to produce more than 60 million tons of coal this year, the bulk of which is transported by rail. Our message to your Committee is simply this: As a result of Congress' decision in 1980 to deregulate rail rates, we in the coal industry need a competitive deregulated pricing structure of the Staggers Act, rail coal-hauling prices have already risen almost 50 percent. And without the threat of coal pipeline competition, this disastrous rate picture will continue.

Mr. Chairman, we in the Illinois Coal Association strongly support S. 1844, the Coal Distribution and Utilization Act of 1982, (and HR 4230, the companion House bill). For, without the eminent domain authority granted in this legislation, the railroads will continue to block pipeline development by denying the right-of-way access necessary to construct these interstate coal slurry systems.

The importance of coal pipelines to the future competitive position of coal from the Illinois Basin was detailed in a 1981 study by the Illinois Institute of Natural Resources, and I have attached this excerpt to my testimony.

The study concludes:

1. Savings in transportation costs to the Southeastern United States may be essential to the future marketability of Illinois Basin coal;
2. Coal pipelines would be the only alternative available to many coal shippers to keep coal rates competitive;
3. A logical consequence of the government's deregulation policy and the principles of free market economy would be to facilitate the development of competitive modes of transportation; and,
4. Such competition is in the interest of both consumers and the coal producers from the Illinois Basin.

Mr. Chairman, it is clear to our Association members that, without coal pipeline competition, rail rates, which can account for as much as 70 percent of the delivered price of coal, will continue to price coal out of the newly-emerging distant Southern markets. And this is particularly critical to Illinois high sulfur coal because these new utilities which will be built in these growth areas of our country are the ones which will, under existing clean air laws, be able to use our grade of coal. What we see under today's concompetitive rate structure is that foreign coal from South Africa and Australia can and is being imported to Florida and Texas at rates below that available via rail service. This Committee and the Congress should do all in its power to prevent this growing problem. The only answer we see is either regulating railroads or allowing coal pipeline competition.

We support the latter for it will not only allow competition to enter the market, but will also provide a more economic means of transporting our coal to the newly-emerging high sulfur markets in the Southeast.

We urge you to act favorably on this measure this session of Congress.

Thank you.

STATEMENT OF GENE MCNARY

Mr. Chairman, I would like to thank you and the Members of the Surface Transportation Subcommittee for giving me an opportunity to offer a brief statement on an issue that we in St. Louis County believe could adversely affect the entire Midwest. It involves the passage and subsequent construction of a coal slurry pipeline and the diversion of Missouri River water for use in that pipeline.

Let me say at the outset that we in St. Louis County are well aware of the problems we as a nation face in trying to obtain our energy independence from foreign sources. In regard to this particular issue we are also aware of the role western coal will likely play in trying to meet that achievement. However, it is also our belief that for whatever reasons we may utilize the water from the Missouri River, everything should be secondary to that of having an adequate consistent supply of water for Missouri residents. It has been pointed out in the past that approximately 60 percent of Missouri residents obtain their drinking water from the Missouri River. In St. Louis County that figure can be as high as 82 percent. This becomes no small issue when you consider altering the virtual lifeline to the majority of this state's citizens. In addition, recent reports have pointed out that higher water bills could result for Missouri residents if the Missouri River is diverted upstream, as well as a possible affect in the taste of the water.

Mr. Chairman, this issue is not a matter of greed as our good friends in South Dakota might suggest. There is also the issue of preserving state water rights. While the current legislation does require pipeline developers to recognize state water and environmental laws it does not appear that such an obstacle would become too great if the precedent of allowing slurry pipelines to be built is condoned by the Congress. The preservation of state water rights is essential to this argument. There has been considerable debate as to whether the water language outlined in S. 1844 and H.R. 4230 is strong enough for the states to retain complete control over their water flow. Even one of your distinguished colleagues who's state would benefit from the sale of the coal, Senator Wallop of Wyoming, has expressed concern over the provisions relating to state water rights.

Mr. Chairman, many of the proponents of this legislation feel that water is not the issue, and that it does not bother them that states bisected by the pipeline have veto power based on water scarcity. They say they'll find other liquids such as oil to convey the coal through the pipeline. If that is the case Mr. Chairman, then why was the issue of water being used placed before the Congress at all.

Taking everything into consideration Mr. Chairman there are too many unanswered questions regarding coal slurry pieplines that need to be addressed. It is too large of a gamble to allow the use of such a valuable commodity as water for coal slurry without understanding exactly what the long term effects will have on our supply. If this issue was essential to this Country's well-being then perhaps I would reconsider this position. However, Mr. Chairman, the railroads have done a good job transporting coal at a reasonable price, and I understand have an unlimited capacity to continue to do so. I see no reason to jeopardize such an invaluable commodity as water while the job is currently being done efficiently and effectively.

In closing I would like to commend my good friend, Senator Jack Danforth, for providing Missourians with a forum to express concerns that I'm sure are shared by a good many people across the State. Once again, thank you Mr. Chairman.

STATEMENT OF JAMES A. DICKINSON, CHAIRMAN, PRIVATE LANDS AND WATER COMMITTEE, NATIONAL CATTLEMEN'S ASSOCIATION[1]

Mr. Chairman and Members of the Committee: I am James A. Dickinson, chairman of the Private Lands and Water Committee of the National Cattlemen's Association (NCA), and I am a cattle feeder from Omaha, Nebraska.

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[1] The National Cattlemen's Association is the national spokesman for all segments of the nation's beef cattle industry—including cattle breeders, producers, and feeders. NCA represents approximately 245,000 professional cattlemen throughout the country. Membership includes individual members as well as 51 affiliated state cattle associations and 20 affiliated national breed organizations.

Members of the National Cattlemen's Association are concerned over how coal slurry pipelines, and how legislation granting pipeline companies the power of federal eminent domain, would affect several serious issues. These issues include water rights, water usage, transportation systems, and property rights.

Although the bill (S. 1844) acted upon by the Senate Energy and Natural Resources Committee contains one provision (Section 6) intended to preserve state water rights and another provision (Section 4(c) (2)) to deny the exercise of the power of eminent domain for the acquisition of water rights which are improvements over earlier versions of coal slurry legislation, several troublesome questions remain. The bill does not address the difficult issue of how to protect the water rights of one state from the unilateral action of another state that decides to allocate to coal slurry pipelines water resources that cross state boundaries.

Another troublesome issue is the apparent fact that these provisions would not give states the authority—the constitutional right—to withdraw allocations of water to interstate pipelines should the states decide sometime in the future—for reasons of water shortage, a demonstrated greater need, or whatever—that such allocations should be withdrawn. (The Supreme Court has ruled that water allocated to interstate projects may not be preempted.)

This is just one instance of the difficulty of turning back the clock should a decisions to construct a pipeline be found to be unwise sometime in the future. As witnesses have testified in previous congressional hearings, the nature of the financing of pipeline construction involves long-term contracts with utilities which require payments to be made by the utilities—meaning ultimately the consumers—whether or not the coal is continued to be supplied.

Coal slurry pipeline legislation is based on the argument that coal slurry pipelines can transport coal cheaper than railroads thereby benefitting the public. We submit that this is open to questions on two counts.

First, the argument ignores the fact that railroads are common carriers. Railroads cannot carry only the most profitable traffic. It is pertinent, I think, to remind this committee that the Congress has committed considerable taxpayers' funds to try to keep rail system operational in the U.S. Is a coal slurry pipeline which carries over one commodity really cheaper if it helps destory the railroads or increases Federal expenditures on aid to help the railroads survive?

Secondly, the economics of coal slurry pipelines is predicated on the use of "cheap" water for transport. Other liquids could be used in pipelines to transport coal, but pipeline companies don't want to because other liquids cost too much. We raise the question of whether water is too valuable a resource, particularly in the arid or semi-arid areas where these pipelines are proposed to originate, to waste on transporting coal, especially since there are alternative modes of coal transportation.

Water is our most precious resource. There are numerous studies showing that our water tables are declining and we are facing shortages with severe impact upon agriculture and other uses. Is it really cheaper to transport coal by pipelines if it means higher food prices, higher costs to individual water consumers, and greater government expenditures on water conservation and water supply measures?

It is a bit ironic that at the same time we are talking about transporting water out of water-short areas via coal slurry pipelines, proposals have been made that the federal government spend billions of dollars to transport water into water-short areas. A federal-state task force in January of this year released a draft report on the Ogallala aquifer of the Great Plains (which is drying up) saying that the shortest and cheapest proposed route to transport water to Kansas, Colorado, and Nebraska will cost at least $11.8 billion to construct and that the cheapest way to get water to Oklahoma, New Mexico, and Texas, high plains area, would cost at least $21 billion. Transporting water further west would, of course, cost even more.

The National Cattlemen's Association believes that water should not be used to transport coal at the expense of other uses or to the detriment of our ecosystems. (One way of doing this would be for the beneficiaries of this legislation to return the water to the point from which it was taken.)

The delegation of the power of eminent domain to private companies is also of great concern to us. With such power, a company would have one main goal: to construct a line as cheaply as possible. A company would not be concerned about the economic health or the pursuit of happiness of the landowner. Such a company would be looking for the shortest, most technically feasible route. There is no incentive for such a company to consider the effect of the taking on future property uses or development, including agricultural uses. Pending legislation ignors and abrogates the public interest involved in the effects of condemnation.

The question of the use of eminent domain for construction of coal slurry pipelines should be left to the individual states to decide. The states should be allowed to consider the public needs and welfare of its own citizens and to protect those interests with suitable conditions on any delegation or eminent domain power.

The legislation before the Senate involves a lot more than just another form of transporting a certain product. It has far-reaching implications and could lead to unintended disastrous results in the future.

We urge the defeat of any legislation granting the federal power of eminent domain for the interstate transportation of coal slurry.

STATEMENT OF JOHN TURREL

My name is John Turrel. I live in southern Illinois on a small farm, which like most other farms within a radius of 75 to 100 miles has minable coal under it. I would like to testify on the impact of coal slurry pipelines in the Midwest. I and most of my neighbors are highly favorable toward the proposed Coalstream Pipeline from Illinois to Georgia and Florida.

COAL OWNER ORGANIZATIONS

To aid in the marketing of our coal, thousands of us Illinois farmers and heirs of farmers, many retired, have formed non-profit groups and pooled our coal reserves. Fifteen or more such organizations are now active in Illinois, but we have become almost totally discouraged because there have been no new sales or leases in the past couple of years. Several of these groups are on the verge of giving up, of letting thousands of hours of volunteer work go down the drain because of diminished demand for Illinois coal reserves.

COAL IS MOSTLY DEEP

The coal under our farms for the most part is deep, that is, it must be extracted by underground mining methods. Much of it is so deep that it can only be brought to the surface either by a hoist or as a coarse slurry; the majority of it is beyond the depth that a moving belt can bring up. Using a hoist costs more than using a belt. If it could be brought up as a slurry, our depth cost-disadvantage would be largely offset.

COAL IS MOSTLY HIGH-SULFUR

Most of the coal under my farm and that of my neighbors is high in sulfur. This means that it costs utilities more to burn than lower-sulfur kinds—a second disadvantage. But utilities in Georgia and Florida are willing to invest in the means that will let them burn Illinois coal, if they can get it shipped to their plants at a cost per Btu that competes with that from South America, South Africa, and Poland.

SOUTHEAST WILL NEED MORE AND MORE COAL

The Florida Electric Power Coordination Group says that utilities in that state will require more than three times as much coal in 1991 as they will this year (7.65 million tons in 1982; 24.6 million tons in 1991). Other authorities predict that the coal needs of the whole Southeast will at least double.

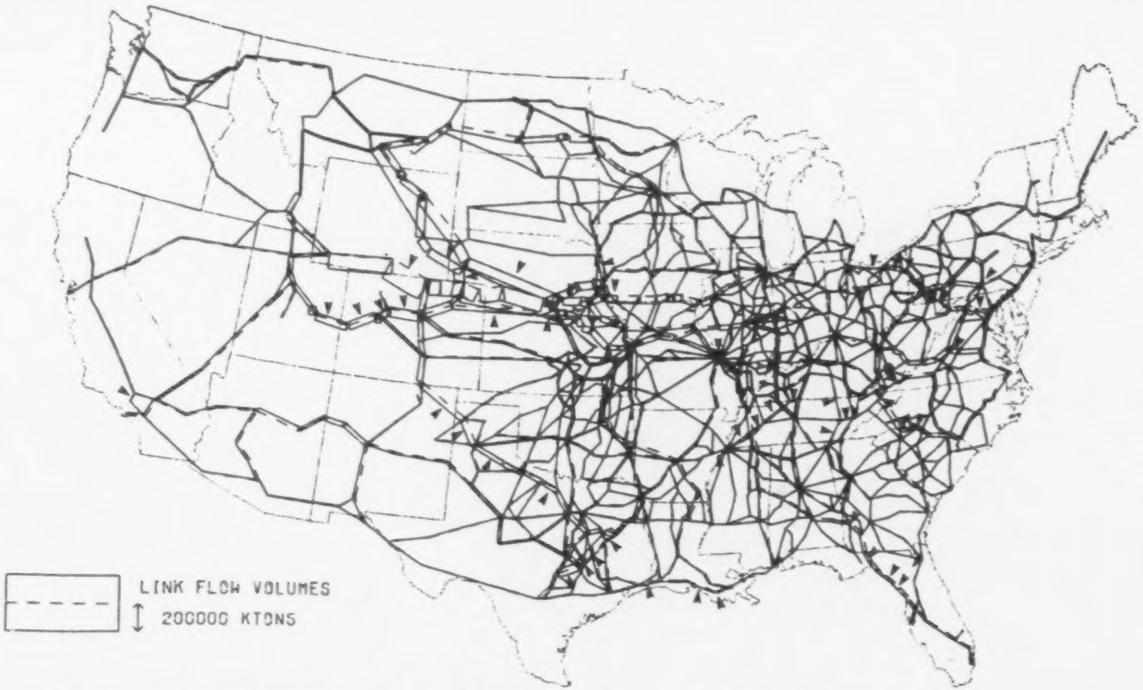
LINK FLOW VOLUMES
200000 KTONS

Figure 5-3. Inter-BEA Coal Traffic by Rail, 1990 (Rail Routing Model Without Rail Mergers)

Source: Transportation Network Model Plot Data EPRI Study EA-2324 Mar 1982 Vol 2

Arrowheads indicate points of congestion

Submitted as part of testimony of John Turrel, 9/13/82

TRANSPORTATION INADEQUATE

A study just done for the Electric Power Research Institute (not supported by nor affiliated in any way with slurry pipeline interests) shows that "increased capacity must be introduced into the (rail transportation) system to permit more flow on individual lines. Without this increase, alternative routes from coal sources must be introduced to permit coal traffic to flow smoothly to ultimate destinations." A map (attached) shows numerous points of congestion (indicated by arrowheads) along existing rail corridors between here and Florida.

PIPELINE CHEAPER

The same study cited above, paid for by the nation's electric utilities to aid them in deciding on what kind of fuel to buy and where, says that in its model "coal shippers in the immediate (coal slurry pipeline) corridor achieved cost savings of $1.00 to more than $3.50 per ton." In addition, the introduction of pipelines into their model reduced rail congestion and reduced average rail service time for non-coal shippers by nearly 14 percent.

PIPELINE ENVIRONMENTALLY HELPFUL

Living in a mining area, I know that coal unit trains frequently tie up street and highway traffic. As the number of trains increases, more and more people, trucks, school buses, and emergency vehicles will be delayed at crossings in small towns like Mount Vernon. But hundreds of miles of oil and gas pipelines now crisscross my state and the rest of the Midwest, and for the most part, people don't even know such lines exist, once in place and reseeded to whatever was growing there before. And unlike oil and gas leaks which are either flammable or explosive or both, the rare possibility of a coal slurry spill doesn't seem to me to be at all disastrous.

PIPELINES MOVE COAL WITH COAL ENERGY

Unlike either rail or barge, a slurry pipeline moves coal along by means of electric pumps. The electricity to turn these pumps will be generated by the burning of coal, not by consuming scarce and high-priced oil or natural gas.

PIPELINES WILL MAKE JOBS FOR MIDWESTERNERS

If a coal pipeline is built from southern Illinois to Florida, it will make more jobs for miners, mining suppliers, construction equipment manufacturers (Caterpillar, IH/Dresser, Deere, Fiat-Allis), and for people needed to build and operate the line. All this will have a positive effect on the economy of the area.

NO FEDERAL MONEY

All midwestern coal rights owners have been interested in ways to help our product get used, such as research projects and conversion plants. Now, many such projects have been eliminated because they drained the Federal treasury. Building a pipeline between Illinois and Florida would help coal get used and thus enhance the nation's domestic energy supply, and NO Federal money would be spent.

PLENTY OF WATER

The line that would help us in Illinois would get its water from the Ohio River at or near Shawneetown. The Illinois State Water Survey says that the water needed would amount to about one-half of one percent of the average daily flow at that point. A reservoir would collect water at flood times, for use during the drier times of the year. At the other end, the water would be used for cooling purposes in the plants where the coal is burned.

COAL-WATER MIXTURES ARE BENEFICIAL

As mentioned in the paragraph on the depth of our coal, there is an advantage to coarse-slurrying coal at the mine face, so that it might be pumped to the surface. In addition, utilities are now experimenting with burning a coal-water mixture in boilers originally built for oil. And coal preparation experts tell me that the more finely coal is crushed or ground, the more easily it can be cleaned of its sulfur and other impurities. Thus varying mixes of coal and water can help all the way from the mine face to the point of use and on into the environment.

LET THE MARKETPLACE BE THE TEST

It is up to the pipeline companies to raise the money, to get the utility contracts, and to either succeed or fail in this endeavor. But they do need the right to compete, to get around the obstructions and delays put in their way by others.

I urge this subcommittee to allow coal pipelines the same treatment accorded to oil and gas pipelines (Federal eminent domain), and to report S 1844 favorably and promptly to the floor of the Senate, where I am confident that it will pass.

Thank you.

ETSI PIPELINE PROJECT, A JOINT VENTURE,
San Francisco, Calif., September 9, 1982.

Hon. JOHN C. DANFORTH,
460 Russell Senate Office Building,
Washington, D.C.

DEAR SENATOR DANFORTH: I would like to thank you for inviting me to testify at your hearing in Kansas City on September 13, 1982. Notice of our invitation to attend your hearing has been provided by third parties who telecopied a copy of your letter to me on Wednesday, September 8. The original letter extending this invitation was just received this morning (copy attached).

We at ETSI believe that S. 1844, the "Coal Utilization and Distribution Act of 1982," which would extend the authority of Federal eminent domain to interstate coal slurry pipelines, will provide substantial cost savings to electric utility rate payers and assist in the economic revitalization of America by creating thousands of private sector jobs.

Our participation in your hearing, however, has been hampered by a law suit filed against ETSI and the Federal Government. As you are aware, on August 18, 1982, litigation was filed by the Kansas City Southern Railway Company, et al. against ETSI and named Federal officials, in the U.S. District Court in Lincoln, Nebraska. Unfortunately, the filing of this litigation prior to your hearing prevents us from discussing publicly specific issues that are involved in that litigation. As you can appreciate, our discussion of these specific issues outside the judicial forum is improper and would be unfair to the litigants, the Federal Government, the State of South Dakota, and the courts.

While we would like to testify at your hearing, unfortunately there is not sufficient time to make arrangements to work out with you the limitations on our ability to testify regarding specific issues involved in the pending litigation, which may be addressed in your hearing.

I am sending you a copy of my written statement before the Senate Energy and Natural Resources Committee hearing on S. 1844, held on May 10, 1982. I hope this information will assist you in your evaluation of the need for Federal eminent domain for interstate coal slurry pipelines, and respectfully request that the enclosed statement and this letter be made a part of your record of the September 13 hearing.

We at ETSI stand ready to meet with you to discuss this legislation or to answer any questions you may have concerning the ETSI Pipeline Project.

Sincerely,

WESLEY WITTEN.

Enclosures.

STATEMENT OF ETSI PIPELINE PROJECT

On August 18, 1982, in the United States District Court for the District of Nebraska, Kansas City Southern Railway Company filed, as Case No. CV82-443, its Complaint for Injunctive, Mandatory and Declaratory Relief against Energy Transportation Systems, Inc. (ETSI) and thirteen named officials of the Federal Government. Joining with the railroad as parties plaintiff were the Sierra Club and the Nebraska, Rocky Mountain and Iowa Chapters of the Farmers Educational and Cooperative Union of America. At the same time and in the same court, as Case No. CV82-1-442, the States of Missouri, Iowa and Nebraska filed a Complaint for Injunctive and Declaratory Relief against seven of the same federal officials and the Department of the Interior.

In the action filed by the railroad, plaintiffs allege failure of the Bureau of Reclamation to adequately consider all of the impacts upon competing uses, of the proposed diversion of a described quantity of water from the Oahe Reservoir, a main stem reservoir of the Missouri River, for use in the planned ETSI coal slurry pipeline pursuant to contract between ETSI and the Bureau following approval by all interested federal and state of South Dakota agencies and authorities. The suit also alleges improper issuance of right-of-way and special use permits for the ETSI pipeline by the Bureau of Land Management and U.S. Forest Service and of construction and stream crossing permits by the Corps of Engineers. Plaintiffs seek to enjoin issuance of the federal permits and the performance of the Oahe Reservoir water contract and an order declaring that such permits and contract are null and void. The suit filed by the States makes substantially the same allegations and seeks the same relief as to the ETSI water contract and related construction permit issued by the Corps of Engineers.

ETSI believes the allegations of Kansas City Southern Railway Company and the other plaintiffs in both actions to be completely without merit and without factual foundation. It is ETSI's position that the federal permits and approvals were properly issued in accordance with law and that the Oahe Reservoir water contract, in addition to being in the national interest, is wholly within the authority of the Federal Government. ETSI plans to vigorously defend the suit brought against it and the Department of Justice plans a similar defense for the named federal officials and Department. ETSI's plans to complete its project will not be deterred by this litigation.

Office of Lieutenant Governor,
Jefferson City, Mo., *September 1, 1982.*

Hon. John C. Danforth,
U.S. Senate,
Russell Senate Office Building,
Washington, D.C.

Dear Senator: While my schedule prohibits personal attendance at the Transportation Subcommittee Hearing this September 13th, I nevertheless would like to take a moment to reiterate my position on the proposed diversion of Missouri River water.

Since the Missouri River is of vital importance to the welfare of our state, any decision that affects that asset deserves careful consideration. We must evaluate the proposed diversion by asking, "Is a coal slurry a good use of our water?". Compared to feeding our people and providing them with jobs, the answer is "*NO*"!

Please remember the welfare of Missouri as you consider this issue on September 13, 1982.

Sincerely,

Kenneth J. Rothman,
Lieutenant Governor.

Brotherhood of Railway, Airline and Steamship Clerks, Freight
Handlers, Express and Station Employes
Kansas City, Kans., September 13, 1982.

Hearing: Jackson County Courthouse, 9 a.m., Monday, September 13, 1982.
Subject: Impact of coal slurry pipelines on water supply and on rail and barge transportation.

Senator Jack Danforth,
Chairman, Senate Surface Transportation Subcommittee,

Dear Mr. Chairman: My name is Bryan K. Whitehead and I am the Kansas Legislative Director and a Regional Representative for the Brotherhood of Railway & Airline Clerks. My organization represents over 8,000 working and retired employes of the transportation industry in Kansas.

We also represent many thousands of employes of railroads in those states which may suffer adverse effects of coal slurry pipelines.

May the record of this Hearing please show that I support the Statement submitted to your subcommittee by Mr. Jack A McGlothlin, Kansas State Legislative Director for the United Transportation Union.

Thank you,
Respectfully yours,

Bryan K. Whitehead,
Kansas Legislative Director.

Saint Joseph Area Chamber of Commerce,
St. Joseph, Mo., September 11, 1982.

The St. Joseph Area Chamber of Commerce wishes to take this opportunity to thank Senator Danforth and the Senate Surface Transportation Subcommittee for this opportunity to submit written testimony on our position opposing possible sale of Missouri River water.

In November of 1981 the Chamber of Commerce adopted a policy statement opposing any diversion of Missouri River water for the following reasons:

(1) The U.S. Corps of Engineers advises that the federal government allow the states to resolve the Missouri River Water Issue.

(2) The sale of Missouri River water for use in a coal slurry line between Gillette, Wyoming and Louisiana and Arkansas could set a precedent that would result in major diversions of Missouri River water to alter dry sections of the Western United States.

(3) Missouri and other downstream states from South Dakota depend on Missouri River water for drinking, domestic and industrial uses.

(4) Water is Missouri's greatest natural resource.

The Chamber will continue to monitor this issue as St. Joseph has a definite vested interest in the Missouri River and its resources.

Kansas City Southern Industries, Inc.
Kansas City, Mo., September 11, 1982.

Senator, Jack Danforth,
Members of the Senate Commerce Committee,
Distinguished Members, Concerned Citizens, and Guests,

Mr. Chairman: A recent recording artist, Kenny Rogers, states this way in a recording of his, "Love or something like it has a hold on me". It's cheap but it ain't free.

Consider the preservation of our American heritage, industry, railroads, our environment and the economic struggles the American people are now having. What of high unemployment, (10%, the latest figures). Now it's said that jobs will be created for temporary employment; don't think for one moment that temporary jobs will suffice the loss of permanent jobs. The lines for collecting monies from the government, legal or fraud, or the soup lines are already humiliating. I can't see the justification. I've heard nothing of survival that works. When you have a hammer in your hand, everything looks like a nail. This proposed legislation in both cases could very well be one, that I and countless American families (Railroaders) will strongly urge that congress will veto out of the pages of history.

I wish that I could end this letter at this point. They say stop while you are ahead, don't talk so much. Americans have never faltered a point or won without persistance.

August 5, 1982, the Senate Energy and Environment Committee Approved S. 1844, Coal Slurry Pipeline. Thus, granting companies the so called right of Eminent Domain to cross what is private land and property. God giveth and government taketh away.

The essence of all which affect jobs and continued rail service, water usage and its supply, waste water treatment cost and equipment, and this shadow, have caused much concern with industry and environment, to say nothing of the American Consumer.

History and mankind are sadly being shortchanged again and again. Approval of this type of legislation and the big oil dollars pumped and primed regularly to offset each and get Congress to approve this proposal. Is this another round of legislation solely where Congress will benefit one more challenge and we suffer at the end of the month? It cost lives, where environmentally we are to live. Members of congress are being approached by outside force and monies, to gut the Clean Air Act. When this occurs, we the American people lose, including the Coal Slurry Act, The Missouri River Basin Act to name just a few.

Any more cuts by Congress or the Senate, or enactment of any of this type of legislation will offset temporary jobs created by Pipeline Construction. Yes, any cost benefits will not benefit the over taxed consumer, the middle class people of our land.

The energy required to move coal is 60 percent greater by pipeline than any American Unit Coal Train ever built by man. Figures by the Office of Technology Assessment, to cut unit trains will gut the very center of energy. Rail capacity should be used and expanded faster to move the products demanded by man. This includes the use of coal and various commodities.

Analyze our environment, the EPA, waste water treatment, life and the right to live, medical evidence that erodes the veins of mankind souls when their lungs are tarnished away. What happens should the pipeline rupture? We question if the product will be 100% coal upon arrival at destination. The longevity in transporting just won't be the same and we, the consumer, bite the dust again. What about this enormous water usage, supply limited. Mr. Congressman, where do we turn when Congress favors the sole right of Eminent Domain.

Presently, construction of nine (9) pipelines is planned. According to the figures of the Slurry Transport Association, most coal moves by rail service. This involves the movement of some 450 million tons, an average of 250 miles which is 13 percent of all rail revenue.

Since 1960, rail service has increased its efficiency mostly by the unit coal train. Coal moves as a conveyor belt to and from destination; it returns again and again and never falters to keep America going stronger than ever before. 10,000 tons can be loaded in four hours. 100 tons unloaded in 90 seconds. (World Book Encyclopedia). Coal is 75 percent of our energy; this is non-renewable energy consumption. Statistics show we have enough to last 400 years by the source of usage we now have. Rail service transports coal around the world via various ports throughout the United States.

We must, therefore, continue to increase the endeavors for permanent jobs, job stability and security, and never falter to create and construct.

People need jobs, America needs its people at work. I cannot emphasize enough the effect on all of us if enactment occurs.

I would ask that our American Forefathers investment not be second rated. I ask, therefore, that the economical, social and environmentally made society be maintained to provide flexible, yet viable and permanent transportation in America. The American Rail System by the consumers must not be obliterated.

I ask, along with the American farmers, American agriculturalist, soil experts, water experts, pollution experts, environmentalists, EPA and rail specialist and independent surveys by those who are knowledgeable in these areas, not to further any legislation in the direction of the pipeline passage. There are too many ifs and whatifs.

Consequently, cutting irrigation, already inadequate water supply and extensive reduced production.

My intent is to reserve the rights of our states, and not to reduce the right of Eminent Domain, and yet see Congress, the Senate undermine their ability to take forced competition.

We do not wish to gut and stave off risk involved with pipeline creation and contruction. The risks are real.

We must maintain a benefit to the people and the public. Not to benefit coal mines, not to benefit big oil companies, gas and utilities, not to benefit construction and coal slurry pipelines but to maintain permanent jobs and avoid the massive layoffs we have already established in not just the rail industry, but keep what we have already.

Coal is already revitalized. The BIG MUDDY MO will maintain our States water supply. It is apparent there is no need for any passage of Coal Slurry legislations.

The movement of coal has been dependent on our American Railroads since early 1900's and no complaints have curtailed that movement. Our nation's energy need no further reduction.

History must not be subjected to death and left-sided skeltons who wish to gut the future of our children and generations to come. We need to protect and reserve what we have. Please take a deeper consideration on all legislation that may affect us.

May God be with your decision.

Sincerely and Fraternally,

FRANK J. SLADE.

Union Pacific Railroad Co.,
Omaha, Nebr., September 20, 1982.

Hon. John C. Danforth,
United States Senator, 460 Russell Senate Office Building, Washington, D.C.

Dear Senator Danforth: Dick Shoup has informed me of your interest in the lawsuits progressed by Energy Transportation Systems, Inc. (ETSI) to secure Railroad right-of-way crossings for its proposed coal slurry pipeline and has requested that I provide you with information as to the nature and disposition of those lawsuits involving Union Pacific right-of-way.

ETSI filed a total of 11 lawsuits seeking crossings of Union Pacific rights-of-way, eight in Kansas, two in Nebraska, and one in Wyoming. The basis of title for the right-of-way involved in the lawsuits differed significantly and accordingly the methods of handling differed depending on the nature of title claimed in the particular right-of-way involved in each lawsuit.

Three of the lawsuits in Kansas involve right-of-way obtained by deed or condemnation. Two of these were tried on an agreed stipulation of facts and the decisions in favor ot ETSI, to the effect that Union Pacific title is only in the nature of an easement, were not appealed. The third case was then settled by agreement based upon the decisions in the prior two cases. One of the cases in Nebraska also involved a portion of the right-of-way obtained by condemnation and, after a legal evaluation determined that Union Pacific's title there also was probably no more than an easement, that case was also settled by an agreed stipulation by the parties without the necessity of a formal trial.

Four of the cases (two in Kansas, one in Wyoming and one in Nebraska), however, involved Union Pacific's right-of-way granted by Congress pursuant to the Act of 1862, in which Union Pacific claimed a limited fee title pursuant to a number of United States Supreme Court and lower court decisions. Since the ETSI lawsuits presented a direct challenge to Union Pacific's title in those cases, they were fully litigated. The two cases in Kansas and one in Wyoming were ultimately consolidated for hearing before the United States Court of Appeals for the 10th Circuit and the Nebraska case was heard by the United States Court of Appeals for the 8th Circuit. After decisions in ETSI's favor in each of those courts, the cases were not further appealed.

After the decisions by the 8th and 10th Circuit Courts of Appeal, Union Pacific pursued a policy of voluntarily granting ETSI applications for right-of-way crossings. The one remaining case in Kansas, which also involved 1864 grant of right-of-way, was settled by the parties by stipulation and seven additional requests by ETSI for crossings were voluntarily granted by Union Pacific. Two final cases in Kansas which were filed by ETSI were, therefore, dismissed without any further court proceedings.

Throughout this entire matter, it has been, and is, Union Pacific's position that it will voluntarily grant ETSI's applications to cross its right-of-way where ETSI has a legal right to do so. Union Pacific has defended ETSI actions only in cases where they presented a direct challenge to Union Pacific's claim of title and then only to the extent necessary to secure a judicial determination of the respective rights of the parties.

While I am not totally familiar with the actions taken by other railroads, I have followed those that were reported with some obvious interest. It has been my understanding and observation that the other railroads have pursued a policy essentially the same as Union Pacific. Only a few of the many cases that have been filed have actually been litigated and most have been settled by agreement or stipulation without the necessity for trial.

I hope this general review is sufficient for your purposes and, if you have any further questions, I will be glad to provide any further information or detail which you may require.

Yours very truly,

H. Lustgarten, Jr.

STATE OF MONTANA,
OFFICE OF THE GOVERNOR,
Helena, Mont., September 27, 1982.

Hon. JOHN C. DANFORTH,
Chairman, Subcommittee on Surface Transportation, Senate Committee on Commerce, Science, and Transportation 5202 Dirksen Senate Office Building, Washington, D.C.

DEAR SENATOR DANFORTH: I understand that your subcommittee conducted hearings on September 13, 1981, in Kansas City and on September 16, 1982, in Washington to receive testimony on S. 1844, the Coal Distribution and Utilization Act of 1982. Prior commitments precluded my attendance at either of those hearings, but I would like to offer the following comments for the hearing record.

Montana has consistently opposed previously proposed legislation that would extend the power of federal eminent domain to interstate coal pipeline distribution systems. Our opposition has stemmed largely from the perceived threat this type of legislation would pose to Montana's water resources and the state's ability to manage those resources.

As reported out by the Senate Energy and Natural Resources Committee, S. 1844 appears to have alleviated the threats by giving primacy to state water laws, notwithstanding the Commerce Clause of the Constitution which would otherwise apply because of the interstate commerce nature of coal slurry pipelines. In my view, the protection of state water laws afforded by the language of S. 1844 and the intent of Congress expressed in the accompanying committee report (No. 97-528) make this the most acceptable coal slurry legislation to be considered to date by Congress. However, the uncertainties associated with the U.S. Supreme Court decision in *Sporhase* v. *Nebraska* raise critical questions about the treatment such protections will receive at the hands of the judiciary. Therefore, I would join with Governor Herschler of Wyoming in proposing that Section 5(b) of S. 1844 be changed as follows:

(b) Congress hereby declares that the establishment and regulation of water rights for an interstate coal pipeline distribution system shall be subject to state substantive and procedural law, and that actions by the states in the exercise of their substantive and procedural water laws shall not be construed as a burden on interstate commerce. The establishment and regulation of water rights by the states is in the public interest, and silence on the part of Congress shall not be construed to impose any barrier to the states regulation of water use.

In addition, the following change should be made in Section 5(c), preceding subsections (1) through (4):

(c) No Act of Congress for the purpose of regulating water use in an interstate coal pipeline distribution system shall be construed to—

Montana is also concerned about the exceptions of Section 4(e)(1) and Section 7 of the bill, which amount to a preemption of state laws governing eminent domain and pipeline siting. In keeping with the new emphasis of state's rights, these provisions should be altered to allow the states to decide ultimately whether and where pipelines will be built.

While I recognize that states cannot ignore the needs of the nation, the people of Montana must have an equal voice. Montanan's continue to have many concerns about coal slurry legislation, but S. 1844, if modified as suggested, is the most acceptable legislation yet proposed.

Sincerely,

TED SCHWINDEN, *Governor.*

[From Today's Farmer—April 1982]

DIVERTING THE MISSOURI

(By Kathy Meyer)

The nation's food supply depends on the availability of three crucial resources: water, energy and fertile soil. Yet, in recent years, energy needs have overshadowed all other U.S. natural resource issues. Because of this, public attention has tended to ignore the growing demands on what may be the most critical of these resources—water.

With our ponds, creeks and streams overflowing from the precipitation of the past fall and winter, it may seem odd to be worried about Missouri's water supplies. But, although Missouri generally has adequate water resources and two of the nation's largest rivers traversing the state, those resources are not infinite.

Missouri's water riches are the envy of many dry Western and Great Plains states. There are a myriad of proposals, however, to divert Missouri River water out of its natural drainage basin, and such proposals continue to multiply.

One proposal to divert Missouri River water for a coal slurry pipeline from Wyoming to Louisiana is being strongly opposed by Missouri state officials. They fear this upstream diversion would set a precedent for other water-hungry developers.

At a recent conference on the diversion question, Stephen Krchma, an assistant Missouri attorney general, said the pipeline proposal and water diversion is being "rammed through" the federal bureaucracy.

The proposed pipeline would draw water from the Oahe Reservoir on the Missouri River in South Dakota. The South Dakota Legislature has agreed to sell 50,000 acre-feet of water annually to Energy Transportation Systems Inc. (ESTI), a consortium of five energy firms. (An acre-foot of water is equal to 326,000 gallons and would cover an acre of land to a depth of one foot.) The water would be used to move coal that would eventually be burned in power plants in the South.

In a slurry pipeline, pulverized coal is mixed 50-50 with water to form a slurry that's pumped through pipes.

Krchma says the upstream sale of 50,000 acre-feet of water annually for the proposed ESTI pipeline may be an illegal use for Missouri River water.

"It is being rammed through without thought being given to it," he says. "All and all, this was done through a lot of high pressure, secretive moves."

Missouri Governor Christopher S. Bond, the Missouri Legislature and Missouri's members of Congress have joined with the Missouri Attorney General's Office in opposing the project until its environmental impact downstream is analyzed.

Krchma explains the project's developers originally planned to use water from a Wyoming underground reservoir known as the Madison Formation. When the federal government ordered an environmental impact statement for the pipeline, it required ESTI to list alternative water sources. The Oahe Reservoir was one possible alternative the company identified.

Some citizens in the West are questioning, however, the use of dwindling ground water supplies for such projects, says Krchma.

"ESTI decided they were getting too much flack about the Madison Formation . . . and they applied to the U.S. Bureau of Reclamation for Missouri River water."

"Yet, the environmental impact statement still listed ground water as the pipeline's source, although it discussed a possible Oahe Reservoir diversion in "a cursory manner," Krchma says.

The deadline for public comment on the environmental impact statement ended September 16, 1981. Krchma says one day later the Bureau of Reclamation announced that ESTI planned to use Oahe Reservoir water rather than ground water.

Immediately after the comment period ended there was another surprising event. South Dakota announced it has been secretly negotiating with ESTI to sell water from the Oahe Reservoir.

Despite the switch to another water source, the federal government did not require a new impact statement, says Krchma. He notes the only impact statement said little about downstream effects of Missouri River water diversion.

"What we are saying is, 'Don't go running off planning these things when you don't know what the impact will be'."

Also, Krchma says the use of water for the pipeline may not "square" with regulations governing federal reservoirs.

ESTI contends the water will be used for industry, which the regulations allow. But, Krchma maintains it is actually being used for transportation of coal. Under the regulations, navigation is the lowest priority use allowed for water, he says.

"We feel that such a use of water is totally improper and illegal," he says.

At the time of this writing, South Dakota's water sale contract awaits approval at the federal level. Missouri wishes to settle the issue through an agreement with other states along the river, but Krchma says the state is prepared to seek a federal court order to stop the diversion if necessary.

"What we're saying is that until this plan gets hard, open scrutiny, it is not just illegal—it's just plain unwise."

Carroll Hamon, director of the Missouri Basin States Association, points out that upstream states view the diversion proposals in a different light than the downstream states. (The Missouri Basin States Association studies and coordinates regional water projects for the 10 river basin states.)

He explains that as part of the 1944 Flood Control Act, six mainstem reservoirs were constructed from Montana to South Dakota. The purpose of the reservoir construction was downstream flood control and navigation.

Under the terms of the Flood Control Act, the upper Missouri basin states were given what amounts to a priority right for the river's water as a trade-off for giving up about 1.5 millions acres of prime farmland for reservoir construction. Thus far, only 6.5 percent of the 4.8 million upstream acres that were promised irrigation water from the Missouri River reservoirs are getting it.

According to the U.S. Department of Interior, about 110 more irrigation units, with the capacity to irrigate 4.5 million additional acres, still are authorized for construction. Should any of the major units be built, the quantity of water that eventually reaches Missouri will be severely curtailed.

Hamon says, "The upstream states believe that they have the guarantee that they can continue to develop the water resources in their area without worrying about the existing water rights downstream for transportation and navigation purposes."

He admits it's no easy job for the Missouri Basin States Association to find solutions for 10 states whose interests are likely to conflict. But, he says, "We hope to get the states to talk together and to share information and not to spring surprises on the other states, which South Dakota obviously did."

Hamon notes that historically Missouri river development for flood control, irrigation, hydroelectric power generation, municipal and industrial supplies, navigation and recreation has been confined to the river's drainage basin. But, he points out, "A new dimension has been added to proposed Missouri River development in the 1980s—proposals for diverting water outside the Missouri River drainage basin. Some of these proposals are so large it is difficult to comprehend their impacts on the basin's hydrology and economy. Others are relatively insignificant in terms of water volume, but raise the specter of setting precedent."

He concedes if all the proposed Missouri River projects were built "the cumulative water withdrawals would have significant effects on the flow of major tributaries and in the lower reaches of the Missouri River itself."

Hamon says, "The greatest concerns of most people are how much water is available and what will be the impact of proposed future withdrawals.

"While answers to these questions are not definitive at the present time, the Missouri Basin States Association is nearing completion of a computerized water accounting system which will provide a valuable tool for evaluating proposed future water uses," Hamon explains.

The water accounting system should be completed by October of this year, he says.

Fred Lafser, director of the Missouri Department of Natural Resources (DNR), explains his agency's concerns: "The amount of water (50,000 acre-feet) we're talking about in this initial diversion is not necessarily going to have a serious impact. The problem is the principle of one state taking that action without Missouri or other states even being allowed to comment on or participate in the decision." DNR is the agency responsible for developing the state water plan and representing Missouri's interest on interstate water resource issues.

Lafser says, "We feel quite strongly that if we don't fight for that principle now, the precedent will be established, and the continued removal of water from the river will go ahead. We'll have no defense. So, we're drawing the line at the first one, rather than at the point when the water question reaches serious proportions."

Lafser says he believes "this will probably be a difficult question for American agriculture."

Agriculture is by far the largest consumer of water. Of all the water used in this country, about 6 percent is for residential, 14 percent for industrial and an astounding 80 percent is for agricultural purposes.

Of the water used by agriculture, about 98 percent goes for irrigation. With it, farmers have increased yields and grown crops where nature doesn't provide enough precipitation. Irrigated acreage increased from 30 million in 1954 to 51 million acres in 1978.

Although agriculture has traditionally received a substantial share of the nation's fresh water supply, that era is ending. With the increase in irrigated acreage, water is being removed from some aquifers faster than they can be recharged by nature. In the Great Plains, only one-half inch to three inches of the 12 to 22 inches of rainfall a year seep back into the aquifers.

The biggest of the aquifers is the Ogallala, lying under large areas of Kansas, Nebraska, Oklahoma, Texas, Colorado and New Mexico. Over 200,000 wells tap the aquifer to irrigate 12 to 15 million acres.

The water table decline in the Ogallala ranges from one-half foot a year in some areas up to five feet in others. Experts say at that rate economically usable supplies in much of the Ogallala area will be depleted in 20 to 40 years.

"The water needs in the Great Plains are enormous for agricultural purposes. Those states are literally mining groundwater," says Lafser. "There's a clear date in the future when that water will be gone, and it won't be replaced for thousands of years."

He points out in the last two decades the agriculture of the Great Plains has converted from dry to wet farming. "When the aquifers are depleted, these states will be faced with a decision: either paying enormous amounts of money to find an alternate source of water for irrigation or reverting back to dry farming. Either way, the depletion of the Ogallala will put a tremendous dent in the food production of the Great Plains, as well as the economy of those states."

Lafser says, "I tend to think when we get to that point, given the choices, there will be enormous amount of support to find an alternate source of water to continue wet farming. Every study that has been done to date has indicated the most economical source of water for the Western and Great Plains states is the Missouri River.

"Projections indicate that within 10 years continued agricultural irrigation demands could consume all of the water in the Missouri River. That's where we begin to develop serious concerns about the precedent that would be set by the South Dakota diversion sale."

Already the U.S. Army Corps of Engineers is studying the feasibility of diverting from 1.6 million to 3.6 million acre-feet of water annually from the Missouri River at St. Joseph, Mo., to recharge the Ogallala Aquifer. And, this is only one of the large Missouri River water diversions being considered.

Lafser explains that nine states upstream dip into the Missouri River and are becoming increasingly vocal about their right to reserve more water for their use. "We are on the bottom end of the river. We have a stronger interest in diversion projects than anyone else because everything affects us."

The Missouri River provides drinking water to 60 percent of Missouri's residents, cools several electrical generating plants, supplies water for industry and agriculture, provides sewage disposal for communities and supports navigation.

Large scale diversions might lower the quality of drinking water because when the river flow is reduced, it increases the concentration of pollution.

Reduced river flows also could be disasterous to Missouri River navigation, and hence, the movement of farmers' grain and fertilizers. In 1981, the Missouri River commercial navigation season was cut short by three weeks because drought in upstream states sapped millions of gallons of water from the six reservoirs that fuel the river. And, there are indications that the navigation season may be cut short again this year.

When the reservoirs are at normal capacity, the commercial navigation season on the Missouri lasts from April 1 to December 1. But, according to officials at the reservoir control center for the U.S. Army Corps of Engineers in Omaha, Nebr., two years of drought in Montana and the Dakotas have dropped the reservoirs' capacity for this year to 50.50 million acre-feet. This is more than eight million acre-feet less than the system's desired carry-over capacity, which the corps uses to supply services through an extended drought.

No single agency mediates conflicting uses on the Missouri River or has the authority to prevent a major diversion that might reduce flows through Missouri.

While agriculture is the major user of our nation's water supply, well-financed energy developers will be competing for future water use in the Midwest. Agricultural interests will be scrambling for water with the nation's largest corporations who hope to tap the West's vast reserves of coal and shale to produce synthetic fuels.

There are no easy solutions to the conflicting demands placed on a finite water supply. Water is the central component of food and its production. Yet, water is a crucial ingredient in every recipe for energy independence. How to meet these tremendous water demands in the 1980s and beyond is a question with grave implications for agriculture, as well as the nation's health and economic well-being.

As stated by U.S. Congressman Tony Coelho of California, who's a member of the House Agriculture and Interior committees: "Unless our legislators and regulators accept the challenge now of solving the coming water shortage the consumers in the United States will come to know what other nations experience now: a diminished, costly food supply."

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